

SEQ ID NO: 3609 ACAAGACTCTTGACAGTTGTGCTTCTCTAGGAGGTTGGGTTTTTTTTAAAAAA
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SEQ ID NO: 3610 ACGCGGGTGCTTTTGTACCTTTGAAAGCCAGCAGACGCTAAGGATGCAGC
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SEQ ID NO: 3611 ACAGAAATTTACAAGAAGTCAAACACAGTGATGCCATTTGCTATGTTTTATT
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SEQ ID NO: 3612 ACGCGGGCTCGCTCAGCTCACCCACGCTGCTGGCCCTGTGAGGGGGCAGGGA
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SEQ ID NO: 3613 ACAGCCTGTCCTCCCACCCAGGAACACCCTCTGCCTAATGACAGGACCTTCCT
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SEQ ID NO: 3614 ACTATTTACAGCTAAACCAGCTATACAGGATCATAAAAAAGTGAGAACATTTT
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SEQ ID NO: 3615 ACGCGGGGCAGCAGGACTCGGTCTAGCAAGGCCATCTTGTTGCCGGACCTTT
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TGNCAGGACAGTCTTNGAANGAACANNAANNACTNGNTTCTATTCAAANCAATTTTCCNTAAAA
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SEQ ID NO: 3616 CGCGGCGAGGTACGCGGGGTCTCGCGGCCGACTCGCAAGATGGCGCCGCGAG
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ANCAGTTCTCTAANAGGTATTTGAAATCCTTACTAAGAAATCCTTAAGAAGAACAATCT

SEQ ID NO: 3617 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAGCANATTTTAAGGGTTTTATTTAAA
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SEQ ID NO: 3618 ACACAAGATGGTGGCCTTGGCGGTTACTCTTCCAACCACTTCCACAATTCCAG
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SEQ ID NO: 3619 CGCGGCGAGGTACTGGAGATGTATTTGATAACCAAGGTTTTAGGTAAATTTTC
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NCTCCTGGGTTTGGCATCNTTACACCANTNCCGCTTTGATTTGAAATNTCCATTAT

SEQ ID NO: 3620 CGCGGCGAGGACGCGGGGAGAGAAGTTTGTGATGCAGGAGGAGTTCTCGCGT
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ANAACCTGGANCCCATTTATAAAGAACTTGNCGAGAAANNTCAGCNAAAGACCCAANTATNGTNAT
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SEQ ID NO: 3621 ACCAAGGCTTTAACGTGTCTGTGCAGGGTATTATCATCTACCGAGCCGCTAC
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ANGGCTTNNAGCGTNNAAANTCTACCTTAATGGNNTANCTTCAAATTTNGGAATNTNNNAATTT
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SEQ ID NO: 3622 ACAATCTATCGACAAAACAAACTCCAAAAGAAGGTGTGAAAGTTAACAAGG
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AATAC

SEQ ID NO: 3623 ACGCGGGGAGTGAGGAGGAACGCGAAAAGGTAACGCCACTCATGGTCAAAG
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CGCCNTCATTTGGNGATGTGNTGGTGTTAACNATACTNTANGAACCCTTTNTNCAAATGNCC
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NGGTAAC

SEQ ID NO: 3624 AAAAAACCCAAATTGATAAATCTGCAAAATCTTAAACTTCTTAATCCATTGA
TAAATATTAAGGAGTAGCTGGTCTTCAAACACCGTAAAAAGTTAAAGGGTTGAAAACATGTTCCAC
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CAAGAAGGTATATATATGCATCTTNAANANAGCTTANAANGTTACAGTTNACTTCTATTACAGNATT
GGTAAAGTTGACTANGGATGGCT

SEQ ID NO: 3625 CGCGGCGGGTACAGATCTCACAGGGACACTCCTTATCCCTTGACAGAGTTCCA
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SEQ ID NO: 3626 ACGCGGGGCAGGACAGCATTTCATATGTAACCATTGTAATGTTTTGCTGTTT
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SEQ ID NO: 3627 ACAAATAAAATCAAAAAGAGCAGTGTTCTGTTGTATTTCATTTCTGCATGTATA
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SEQ ID NO: 3628 ACGAGACATGTCATGCTGCCCAAGGACATAGCCAAGCTGGTCCCTAAAACCC
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SEQ ID NO: 3629 ACCACAGTTCACAAGTGACAGGAGAGAATTTTGATAAATTGTTAGCTGGAAAG
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SEQ ID NO: 3630 ACAGATACTTATGAGGCCAGCTGGTCTTTAATTATGTGGGTCCGAAGCAAATT
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SEQ ID NO: 3631 ACGCGGGGAAGTATGGAATAAACTACTGATGCAGTGAANACAGTTGAAAA
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AGGACATCAAAGAAGTCANGCAAACTCATCTTGACCCCTGTTGCATGCTAAGGAACNCAGCTTG
GAAGAAAAGATGATATANCAGTTAACAGCGNTGCATACNTGGNAGANGNTTNCNTAATNATCTNN
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SEQ ID NO: 3632 ACCTTTCCTTTTCCAAATCTAGCTGAAATTTCTCACTTGTTTTCTTTGATGA
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GAGAACATCTCCTCAGAATGTCATAGGCTGCTTTATCTCCTCTAGGGGAGCTGGTCCTGGGCTAGN
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SEQ ID NO: 3633 GGGTACCAAAGTACCAATGGGCTGCAAGAGGTTTAGATTATTGCTACCCAC
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SEQ ID NO: 3634 GGGTACAGGCGGCAACTTCCAGAGCTTCCCCTCAGTGCTTGGTGACTGGCAC
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SEQ ID NO: 3635 ACAGGGAAAGGAAAAATTTTCACCAACAGAGGCAGTCTCTCATAGAGTATAA
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TNGAAATNAAATGANTTCCAAAGNTAACCTATTATGAANTATAAATTTTTTCTTGG

SEQ ID NO: 3636 AGCGGCGAGGTACCTGCAGGCCTCCTACACCTACCTCTCTCTGGGCTTCTATT
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SEQ ID NO: 3637 ACGCGGGTATTGAGAGTGATAGTTTGTGGCTTGTANAATTCTATGCTCCATGG
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SEQ ID NO: 3638 ACTTTTCTTTGAAGTTTGTAGCGGTCAATTTGCCTTTTTAATGAACATGTGAAG
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SEQ ID NO: 3639 GCGGCGAGGTACGCGGGGGCTGTGCGCGGTGGACTCGTCGGAGCCGCGGGC
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TGGCGG

SEQ ID NO: 3640 CGGTACCCATGCACAGCAGCTGTGGGGTGTGGGCATCTTCAGGTGGTGTCT
GGTAAAATCGTTAGAAATAGCTGTATGAAGGAAACCACTGGGAGGAAATGAAGTTTTTCAGGATGGT
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SEQ ID NO: 3641 TTACACATTGCCTCACTTTATATTTTTAAATGAGAATCTTGTTTATTGTATTGTA
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SEQ ID NO: 3642 ACACTTGAAACCAAATTTCTAAAACCTGTTTTCTTAAAAAATAGTTGTTGTA
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TCTGGTTTCAAGTCTCAAGGCCTGACAGACAGAAGGGCTTGGAGATTTTTTTTCTTTACAATTCAG
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SEQ ID NO: 3643 ACGCGGGGGCTGACTCTCTTTTCGGACTCAGCCCGCCTGCACCCAGGTGAAA
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CATTATCAAATCATGGNANCAACCTNTTTTACTCATNTNCTNNAACNTACCTCACTATCCCTNAAC
CACTTCTCCTTTAAATCTTGGCACTACNCATTTAATCT

SEQ ID NO: 3644 ACAAATAAAATCAAAAAGGGCAGTGTCTGTTGTATTTCATTTCTGCATGTATA
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SEQ ID NO: 3645 ACACATCTTATAGCTGAACGCCTATGTAAGAGTGAAAAATTTTAGCAGCTTG
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SEQ ID NO: 3646 ACTGTAAAAGTTCTGACACAAGACAGTGGCAGTGGTTACTTTTCATCGACTTT
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CTAACTATATACTAGGTGATAAAGAATGCATACTTTATAATATAAAACCTGTCTACACATAGTAGT
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TACCACCCTTCA

SEQ ID NO: 3647 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTACCCTCAGTCTTTTANACTCTCAGCTG
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CATCTCGGGGACCCTTTCTCTTACTGTAAAATTGTTTCCCTCCATTCTGAGGGTTTCATCATCAGGT
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GCGTTGGAGGGT

SEQ ID NO: 3648 ACGCGGGGGGTGGAGGTGGTAACCGTGATAGTAGCAGCTCCGGCGGCAGCA
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SEQ ID NO: 3649 ACACTGTTGGAGAGATGAGACAGTCACACCAGCTGCCCTAGTGGGGCTCTT
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GCCCTTNTC

SEQ ID NO: 3650 ACTTTTTTTTTTTTTTTTTTTTTTTTNGGCCCTTATATCAGTTTTATTGGTGGGTTT
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ACCAAGTGAAANTCCTGCCATCCTGCTGNANCTNCNGTGACAATCTTAAANTTGCGGGCCTTTTC
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SEQ ID NO: 3651 ACAGCATAAAGTCTACTTTCCTCTTGAAGAAACCATAAGCTACCAGCTGTTGG
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CCGGCCTNNGCTGA

SEQ ID NO: 3652 ACGCGGGGGTGTGAGTTTTGTGGACCTGGAACAATTTAACCAGCAACTTTCC
 ACCACCAITCAAGAGGAGTTCTATAGAGTTTACCCTTACCTGTGTGCGGGCCTTGAACCAATTCGTC
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 ANAACCAANCTGAGCNTTCTCGAAGGAATNTCCCCNCANTTTANAAATAANTTTTTANGGCTTTNA
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SEQ ID NO: 3653 ACGCGGGGAGCGGTAGCTGGTCTGGCGAGGTTTTATACACCTGAAAGAAGAG
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 GAGGAGGTCACCAAGAAACATCAGTATGAAATTAGGAATTGTTGGCCCTGTATTATCTGGGGG
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 GTTCTGCATTCTGACTTTGGAACCACAGATGAAGNNCATACTTCTAACTGGCTTTTAAAGGTTTGT
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 GACCCNAAAAGGGTTTTAATTAATAATTTGCTTNAACCTATTGGAATCCCTCTTTNTTCTTGCTTC
 CAACTT

SEQ ID NO: 3654 ACGCGGGACCGAATAGAATCGAATGGAACAATCATCGAATGGACTCAAATG
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 ATGGAATCGAATGGAATCATCGAGTGAATCGAATGGAATTATGATCAAATGGAATCGAATGTAA
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SEQ ID NO: 3655 ACGCGGGGAATCTGCCATTTTCTGTCCCTGAGTGAGTCTCTGGCGTCCCAAAT
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SEQ ID NO: 3656 ACGCGGGGGACACAAAGGACTCTCGACCCAAACTGCCCCAGACCCCTCTCCAG
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SEQ ID NO: 3657 ACTCAAACAAAACAAAACAAAACCGGAGTAAAAATTACCGTTAAATTTTAAAC
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SEQ ID NO: 3658 ACAAACATGTGGCAGGTAAACATCAGGCATAAAAAAGGACAAATACTGAAA
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SEQ ID NO: 3659 ACGCGGGGGTGTCTATGGCCGGCTCCTACCCTGAAGGTGCACCTGCAGTCCTC
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SEQ ID NO: 3661 ACAGTCTTTCATTAAATAAGAATACTTACACATACATTTTTCAGATATTTCTAC
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SEQ ID NO: 3662 ACCACCCTGAGTTCCTGTCCAGGCCTATCAAGCCCTCCCCACCATACTTTGGC
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SEQ ID NO: 3664 ACAAATATCCCCACTTCCCTTGAGAAAGAGTATATCTAAAATACACTTTGAT
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SEQ ID NO: 3665 ACCGACCATAGAGCAAGAATCAAGATTCTGCTAACTCCTGCACAGCCCCGTC
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SEQ ID NO: 3666 TTCGGCCGAGGTACGCGGGGGAGGGTTCCAACTTTTCTGCTTATCTGGGAGGT
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SEQ ID NO: 3667 CGTNCGCGGGGACGCTGAGGGGTCCGAGGAGACCGTGAGGCTNTGGCCTG
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SEQ ID NO: 3668 ACAAATAAAATCAAAAAGGGCAGTGTTCTGTTGTATTTCATTCTGCATGTATA
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SEQ ID NO: 3669 ACTCTTGATGAAAGACCGTGAAACCAACAAATCAAGAGGATTTGCTTTTGTCT
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SEQ ID NO: 3670 ACTTCTTGCCCTTGTAAGAATTTCTGAGGTTTTCTTTCTGAGTCTGGTTAATAA
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SEQ ID NO: 3671 ACCCTTGGAAGATGGGAAAGGTGAGGGAAATATTTGAAGCAGGGTCAGAAC
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SEQ ID NO: 3672 ACAATACAGAAATGCTGATGTCTGAGCTGAGTCCTGAAGACCAGAGAGTATT
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SEQ ID NO: 3673 ACGCGGGCTGGAGGAATGGCATCAGACCCATGCCTCTGTGATTGCTCCCAGC
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SEQ ID NO: 3674 ACACTTGAAACCAAATTTCTAAAACTTGTTTTCTTAAAAAATAGTTGTTGTA
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SEQ ID NO: 3676 ACTTCATGAAATTATAAACATGTTTTTAAAGCTTGGTTTTTAAAAAAGGCGTT
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SEQ ID NO: 3678 ACCGACCATAGAGCAAGAATCAAGATTCTGCTAACTCCTACACAGTCCCCTC
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SEQ ID NO: 3680 ACCTGTGAACCAAGTGTTTTGGGCAGGATGAGATGATCGACGTCATCGGGGTG
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SEQ ID NO: 3681 ACCCAAACCTCCAATCCCCAACGCGGTCTCAA GTTCAGACTGGGCTCCAGC
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SEQ ID NO: 3682 ACGCGGGGGTGATTGAGAGAGGGGTTAGAGGCGGGTCCAGCGCTGCCGCA
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SEQ ID NO: 3683 ACTATCTAGTGTCTAAAACATTATTCTCCAGAAAAATCAATCATTTTCTAGCC
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NCATCGNA

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SEQ ID NO: 3687 ACGCGGGGGACGCTGAGGGGCGGAGGAGACCGTGAGGCTCTGGCCTGCAG
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SEQ ID NO: 3688 ACAACAGCTCCAAGACAACACTTAATTCCAGCTATACGTGGCAAAAGATGTT
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SEQ ID NO: 3691 ACTCATCTTCTGACTTAAAGCAGATTCCCATTAAATGGACAGCACCAGAAGC
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SEQ ID NO: 3692 ACACTTGAAACCAAATTTCTAAAACATGTTTTCTTAAAAATAGTTGTTGTAA
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SEQ ID NO: 3693 ACGCGGGGAATGAAGTGAGGCCAGTGGCCGGGTCTGCTGAGTCCGCAGCACT
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TGTTG

SEQ ID NO: 3694 ACCATGATCCTGACCAATTTGACGGCGCTGCACAGGGACCCACAGAGTGGG
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SEQ ID NO: 3695 ACGCGGAGAAGAAGGCCAAGAAGCCTGCACTGGTGGCCAAGTCTCCATCCT
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SEQ ID NO: 3697 ACACTTGAAACCAAATTTCTAAACTTGTTTTTCTTAAAAAATAGTTGTTGTA
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CAA

SEQ ID NO: 3699 ACTAATTGAACCGATGTTGACAGTTGTGGTTCTGAATTCACCAAGTTCTCTTC
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GGCNAATTCC

SEQ ID NO: 3703 ACAAAGCATTCTGCTTCCAAGAGAAATATCATTGCTACAAAAAACTGGCAC
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SEQ ID NO: 3704 ACGCGGGGACATATCCAACCTCTGCTCTCCCTCCTGCAGGTGACCCAGCCATG
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SEQ ID NO: 3705 ACGCACCTGGGNTNAAAATGCAGGCGATTCTGAGGACGCCATCCCTGAGGA
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SEQ ID NO: 3706 ACCTGTATTGGGGAAACATAGCATACAAGCAAGAAGCTTACAGCCTCAGTGG
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GCATGTCAATCCAAAGAAGCAAAACAATAGGTAATTCTTGTAAGAGCCTGTGGCTATCGAGGCAT
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SEQ ID NO: 3707 ACGCACCTGGGGTCCAAATGCAGGCGATTCTGAGGACGCCATCCCTGAGGA
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SEQ ID NO: 3708 ACGCGGGGGGAGCCAGGGCCGGAAGTAGAGCGGAGGTGGTGGCGGCGGAGG
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SEQ ID NO: 3709 ACTTTTTCTTTGAAGTTTTAGCGGTCAATTTGCCTTTTTAATGAACATGTGAAG
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SEQ ID NO: 3710 ACCGACCATAGAGCAAGAATCAAGATTCTGCTAACTCCTGCACAGCCCCGTC
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CCCNCT

SEQ ID NO: 3711 ACCCAAGGGGGTGAGGATGGCATTGTGGGCGATCAGCTCCCATCTTCCCTCT
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SEQ ID NO: 3712 ACTTGCTGGTCTCAAATTTCCACAAGGAGATATCAATGGTGATACCACGTTCA
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SEQ ID NO: 3713 ACACAATGTGCTTCCTTGTGTATTATAACACATTTCAAATAGGGACCTTTG
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SEQ ID NO: 3714 ACATTTACCCCTGATCATAAAAAGAGGGACAAGGGAGCACTGGGCTCTACTGG
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ATCAAACCTCTCTCTCTAAATTTAAATGCTGTTGAATATGATACTTTTGAGGAGAGAGTGTGCTCA
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SEQ ID NO: 3715 ACGCGGGGACTGCGGGCTGGTCCGGGCTCCTCAGGTTCCAGACCCGACCGTTA
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SEQ ID NO: 3716 ACGCGGGGGATGCTGCGCCTCTCCGAACGCAACATGAAGGTGCTCCTTGCCG
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SEQ ID NO: 3717 ACCCTTGGAAGATGGGAAAGGTGAGGGAAATATTTGAAGCAGGGTCAGAAC
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SEQ ID NO: 3718 ACAGAAAGTAAAAATGCTGTTACAATCTCAGTGTAAGTGGTAGCCACAGACG
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SEQ ID NO: 3719 ACTCCAAGCTGCAGGATTTTATAACTGGGGCAATTGTGGTTGGATTTTCATCCC
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CCTTTNTTCAANAAANTGAATCCNTTGAAAATAATTA

SEQ ID NO: 3720 ACGACTTANATAAAATATGATGAGGAAGGTGACCCAGATGCTGANACTCTTGG
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SEQ ID NO: 3721 ACCACGAAGTCAATACTTCTCAGTGAGTAGGGAAGGCAAAATACTTCTCTCAA
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SEQ ID NO: 3722 ACTGGGATAAATGAAGAAGAAGGCATAAGGACAATAAACATGGAAGTCCAC
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SEQ ID NO: 3723 ACCACTGTCTTGGAATAACAGCTTTGAGACACCAAATAAGATGTCAGAAGCC
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SEQ ID NO: 3724 ACTGAGACCTATTGGAGCTTGTGGCCAGCATCCCATCTGCACCGTTGGTCAGG
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SEQ ID NO: 3725 ACGCGGGGTTGGCGATGGATATGTGGTTCATCTGGCCCCCTCCAAGTGAGGTC
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SEQ ID NO: 3726 ACTTTTAAATGGAAACAACTTGACCAAAAAATTTGTCACAGAATTTTGAGACCC
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SEQ ID NO: 3727 ACGCGGGGATATTGGAGCAGCAAGAGGCTGGGAAGCCATCACTTACCTTGCA
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SEQ ID NO: 3728 ACTTCCTGTTCTGGCTTCCCAGAAGTGACCTCAGCTTCATTCGGTCCCTCTGGT
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SEQ ID NO: 3729 ACGCGGGGGTGGTGGAGAAGGACGTGCCGTGCCGCTGGGTTCTGAGCCGGA
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SEQ ID NO: 3730 ACCACCTCAGGTGTTTGCTGTCTTTCTTCAGGTTCCCTCTACTTCTTCTTCAGAC
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SEQ ID NO: 3732 ACACAATGGTTTATTAAAGGAATGTATGGCCACATCAACCTAGCAAGGATT
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CAANT

SEQ ID NO: 3733 ACATCATCTGGTTCTCCAGACCCCTTTTAGGACTGAACTGTGCTTTAAATAGT
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SEQ ID NO: 3734 ACATAGACAAGTTTCTTGTAAGACAGAAAACAGAGAAATCCACAGTAACTCT
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GAAATTGAGGAACTAAAGGAACTGCTACCCGAAATTAGAGAGAAGATANAAGATGCAAAGGAGT
CTCAGCGTAGTGGAATGTAGCTGAACCTGGCTCTGAAAGCTCTCTGGTGGAGAGTTCTACTTNANG
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TTCCTCATCAAATTGTGTGACTGATATNTCCACCTTGTCAAAAAGAGAGGAAACCAAGAGGAA
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SEQ ID NO: 3735 ACTTTTTTTTTTTTTTTTTTTTTTTTNGGATATCGATCTCTTTTAAATTTTTAGGCC
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GTGTCATGAGGTGTCCGGTGGAGGTGGCAGCCNANCTCTGGGACTAATCACCGTGCTGGGGACGG
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GACNGTCGATGGTATTAGGNTANAAGCACCAGGGGACCCACNNAACNGTGTNTNNNAAACACC
ANCCCTTATTTACACACTGGGAGGGCNTNNCNCNTGAAAACACAATTTCTTTCTTTTACAGGGGG
GCCNACTGGTACCTCTGGNCNTAACNCNCTAATGGCGA

SEQ ID NO: 3736 ACGCGGGATCCCAAGTCCAGCGTGAAGGGCCACAGCCCCTCTGGCTGCCAA
GCACGCAGATCCCATGGACATTTGGGGAAGGGCTCCTTGGGCTGCTGGTGAACCTCTGTGGCCA
CCACCTCCTGCTCCTGACCTCCCTGGGAGGGTGCTATCAGTTCTGTCTGGCCCTTTCAGTTTATA
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SEQ ID NO: 3737 ACAGCGGGGGCTTTTGTGTTGTGTCCCTGGCCATGGCGCTGCAGCTCTCCCGGG
AGCAGGGAATCACCTGCGCGGGAGCGCCGAAATCGTGGCCGAGTTCTTCTCATTCGGCATCAAC
AGCATTTTATATCAGCGTGGCATATATCCATCTGAAACCTTTACTCGAGTGCAGAAATACGGACTC
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AATTGGTTATACAAGTGTNAGNTCANAAACCTGGTTGTANTTATCTCAAATATTGAAAGTAGGTG
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SEQ ID NO: 3738 ACCGACCATAGAGCAAGAATCAAGATTCTGCTAACTCCTGCACAGCCCCGTC
CTCTTCCTTTCTGCTAGCCTGGCTAAATCTGCTCATTATTTTACAGAGGGGAAACCTAGCAAACCTAAG
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NTTCAAGCTTNTACACCCTTNTGCCCTCTTTTCATTGGCTGCNCCNNCANCCCAGCCNTCTCAACTCT
GGTTTGTTTTTTNCCTTTGGCCNNTANGAAAGGTTTACNAGTAAAATCCCTTGCTAGG

SEQ ID NO: 3739 ACGTCAAGCAGGAGTGCAATCGCACCCACAACCGCGTGTGCGAATGCAAGG
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TGCAAGCTGGAACCCCAGAGCGAAATACAGTTTGCAAAAGATGTCCAGATGGGTTCTTCTCAAAT
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TCAGAAAGGAAATGCNACACACNACAACATATGTTCCGGAAACANGTGAATCAACTNAAAAAT
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GTGTTANAGANGGATTTAAACGGGAACCTCAGCTTCACAAGNAACAGTACTTTCCANCTGCTTGAA
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SEQ ID NO: 3740 ACCATTGGTGGTGGTATCTTTCAAGCAATCAAAGGTTTTTCGCAATTCTCCAGT
GGGAGTAAACCACAGACTACGAGGGAGTTTGACAGCTATTAACCAGGGCTCCACAGTTAGGAG
GTAGCTTTGCAGTTTGGGGAGGGCTGTTTTCCATGATTGACTGTAGTATGGTTCAAGTCAGAGGAA
AGGAAGATCCCTGGAACCTCCATCACAAGTGGTGCCTTAACGGGAGCCATACTGGCAGCAAGAAAT
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CTGGTATCTTGTGACAAGATTGCCCTCTGCACAANTTTCCCAATGGTCTCANTTTGCAAAAAA
NCCCTCCAGTTGCCTTCAACTCANTTACCTTCTCACCCCTTTTGGAACCTANTCGACAATNTCAGT
AGGGACTTCTTNTAANGATTTCTTTTAAACAAAACAAGTTGTGGGTTCTN

SEQ ID NO: 3741 ACAATTCCTTGTTTTCAAGGGTAAGTTCCAAGACTTCCAGACTCAGGTTTTGAA
GTCAGGTCTGGTGAAGGTCGTCATGCTGTTGTGATAGCGTTTAGGTCTTNCATTAGTCTTCCAG
GTGGGCCATCTCTTTGGTCAGCTCATCTGGTTCATANCTACTCTCNGAGTCTTNCACATCATGTGG
CTCCTGCNCTTNAANGGGCACTGGNAACAACCACTGGCATAGNAGGCCCGGCTCCTNNCTANAGT
CCCNNTNGGATGCTTGTCTTANNCTAGANCTGAANTGTGNATGGANCNCAACCTTGCTGGGACAA
CTTATCGNGNNNTTCTTGNCTANNGCTAGATCATCAAGTAGNGGT

SEQ ID NO: 3742 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGGNCANCTATTTAATTAGGTTCT
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TGNTGANTCNATTTTNGTTGAACNGGCAANTGNAAATTNNNGGTGNGNTCTNCNNNAAGGAACNC
NATTGNGGCCCANAGGTCCCGTCCNAAGGNNTAAGCCACTTCCNGCTGCTTTTANGGAAAACA
NCCCTTTTCCCCNGTGGCG

SEQ ID NO: 3743 ACTGTATTTATTTCTTATTTTATACAACCTCTTACTCTTTACAAAAATGGTTATA
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GCCTTTTTTAAAAATTATAATACAAAGGTCTGTGCTCTATAAGCAGTCTCCACTGTGCATTGTAAC
AATAAGGCTTACTTTTAAATACAAAGACTAAGCGGTTTGGGAGTTATGAACCACTGGATTTAAACA
ACATCATTTTATAATTGCTTTTTGCATCTTTTTTGTTTTTTGGGATCTCCTCACTNCATCANGGGTGCTN
ANCAGGCTTGAGATTCTACAGCAGATTCTTCTTTCTCTGGACTCTGAATCGCTTTCAGAATCATCTG
GACTTTCANGATCAGGTGAATCATCATCNGCCATCATCA

SEQ ID NO: 3744 ACTGGAGATGTATTTGATAACCAAGGTTTTAGGTAAATTTTACCAGTATTAG
TTCTATTTGCAAACCTGAAAAATGTTGTAGGCTTAATGTAAATAAACCACATTAGTGAACATTATAT
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SEQ ID NO: 3745 ACACGAGAAGCTCCGAGGATGGCTGAAGTCCAACGTCTCTGATGCGGTGGCT
CANAGCACCCGTATCATTTATGGAGGCTCTGTGACTGGGGCAACCTGCAAGGAGCTGGCCAGCCA
GCCTGATGTGGATGGCTTCCTTGTGGGTGGTGCTTCCCTCAAGCCCGAATTCGTGGACATCATCAA
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AANCCCAGTAACCTGCCCTTTCCTTGCATATGCTTCTGATGGTGTCTGCTCCTTCTGTGGCCTC
ATCCAAACTGTATCTTCCCTTTACTGTTATATCTTCAACCTGTAATGGTTGGGACCAAGGCCAAATCC
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SEQ ID NO: 3746 ACTTTGTTTGCTGATACAAGGTGAGCCAAAGGGGTGGTGAAAAGAACACACN
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SEQ ID NO: 3747 ACTTTTCTTTTTTTTTTTTTTTTTTGTCTGTTGTCCCAGATTTATTGAAAATAATA
CAGCACTACAGAAAAAATTCAAAAAGGTCCCCGAGGCGTTTTGAAATTCATCCCCAACTGTAGG
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NNGTCAGGGATCTTACTTTNAATAATCTCCTGAATCCCAAGGCTTGANANCCTTAGGAAACATTA
TTGGCNTCTCCTTTCTTNTNCTCCTCNTGCANCNTTGATGGGNAAATACCCTNTTAACCTGGGNCCT
TTNTGAAATCCGTINANTCAAAANTCCNTNACATNAACCTGNNTTTTTTNTTNNAGNAACCTTTT
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AGCCCCCTGTANTANCCTTGGGGCCCGAAACCCCCCNATATGGGNGNAATTTCA

SEQ ID NO: 3748 ACTGGCCAGGAAGGTGGAGTAGGTTTCAGGCCCTGGGGATTTCAAGTGCAGA
CTGATGGCCTGGGAGGGGCCAAAGAGACCAGATCCTGGCAGCAGCTGAGGAGGTGCCCAAGGGC
ACTTTCAG

SEQ ID NO: 3749 ACGCGGGGGTGCCAGGCGATCTTCCCTGGAGGGTCATTAGCAGCATTGAGCAG
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AAACAAGCCTTNATGATGCCATACTGANCTNGACACACTAACGAGGATTCCTATANGGACTCCAC
GCTGATCTCCNNTTGTCTGNAANACAACCTCACCTTTGGACGANCGACCAGNAGGATTAAGANG
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CCNTATCTTTCCTT

SEQ ID NO: 3750 ACGCGGGGGCATCCTANCCGCCGACTCACACAAGGCANGTGGGTGAGGAAA
TCCANAGTTGCCATGGAGAAAATTCCAGTGTGAGCATTCTTGCTCCTTGTGGCCCTCTCTACACTC
TGGCCAGAGATACCACAGTCAAACCTGGAGCCAAAAAGGACACAAAGGACTCTCGACCCAAACT
GCCCCAGACCCCTCTCCAGAGGTTGGGGTGACCAACTCATCTGGACTCANACATATGAAGAAGCTC
TATATAAATCCCANGACAAGCAACAAACCCTTGATGATTATTCATCACTTGGATGAGTGCCACAC
CAGTNAANCCTTAAANAAAGTGTTTTGCTNGAAAAATAAAGAAATCCCAGAAATTGGCCAGAGCA
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ATTTTCAAACCGTCTTNTATTGCTTACCNAACCTGNAGATNCAAGCTNTGTNGNTTGACAANATGN
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SEQ ID NO: 3751 ACACTTGAAACCAAATTTCTAAAACCTGTTTTCTTAAAAAATAGTTGTTGTA
ACATTAAACCATAACCTAATCAGTGTGTTCACTATGCTTCCACACTAGCCAGTCTTCTCACACTTCT
TCTGGTTTCAAGTCTCAAGGCCTGACAGACAGAAGGGCTTGGAGATTTTTTCTTTACAATTCAGT
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AAGCTTGACTGTNTGGNCACTCATCCAATNNGATGANTAANCATCAAGGGTTTGTGTTGNTTNTCTNT
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AGGG

SEQ ID NO: 3752 ACTATAAGANTAAAGAAAATTGTGTTGTGGATAACATCAAAGTGTGCAGTAA
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ACTNGAGTNACCATTGCNATGTAA

SEQ ID NO: 3753 ACTCATTCCTCTTCAAGAGCACCACTGGAAACATCTTTGGAATTGATGGGACA
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SEQ ID NO: 3754 ACGCGGGGAATCATCGAATGGAATGGAATGGAACAGTCAATGAACTCGAA
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AAAAAAAAAAAGTACCTGCCCCGGCCGGCCGCTCNA

SEQ ID NO: 3755 ACAGATGCAGCCGTGCAGGAGCCGAGCCAATTAATTTTCATTAGAGGAAGAAA
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AAGGCTCTACACATACTGCATGCTCAGGACCCATAGATGAACTATTAGACATGAAATCTGAGGAA
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GCTGTTGAGTGAGATCTTCAATGCTTCCCTCCTTGGAAAGAGGGCGAGTTCAGCAAAGAGTGGGCCG
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ANGGCCAGACAGGCTCANGTTTCCTTCCCTCGCANCTTTAGACCAAAATATGAAAGACTTACAG
GCCTCGCTACAAGAACCTGCTAAGGCTGCCTCAAACCTGACTTGCCTGGTTCANCTCTTCGNTTG
ACCTTCGACCCACTCTCAAATTCCTGATGCTGGNGGGAAAACCCGGANTCTA

SEQ ID NO: 3756 ACGCTGGCAGGGCCAGTGGCAGGAAGGGAGGGACAAGTGGACAGTGGTGTG
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GNG

SEQ ID NO: 3757 ACTTCTTGCCCTTGTAGAATTTCCCTGAGGTTTTCTTTCTGAGTCTGGNTAATAA
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CCTGTCAATTTGGCGACGCGCAGCTAGGGACAGCTCCACCTTCAGGTCCTCCAGCTGTTTCAGCAN
CTCCTGNTTCTTNTTNCCTGCGAAGGATCTTNANCCTNGATCTTAGCNNTTGCTAGNTCAAGCCTN

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SEQ ID NO: 3758 ACTAAAAATTTTAAACGTCACCTTGGTGTTTTTTTCAAGACTAAGTGTGÁTAC
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TCCTTCCCTTGTTTTTAAAAATAAGCAACGTCTATACTTCCATCATTTANAGATCATCAAGCTGACTT
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SEQ ID NO: 3759 ACGCTTTGCCAGTGTGGCTGGGTCCACCTGCATCTAGAGAAAAAGAAAACAC
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CCTCCAGGTCTTCCANGTCACTAGGAAACAGAAAGTCGTTATAAGCACATGAGCTCNCTGAGNTG
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SEQ ID NO: 3760 CATCCTNCTATTGATATTANCTANTGTCATTAAGCCNTANCANACAGTAANGC
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GTTGCTTAACTTNTNCTTTCCCAAAGGACCCTNATNANTCGTNCTGATACTTTGGGTGTATNTGGA
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SEQ ID NO: 3761 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTGGAAAATCACTCCTTTGTCTTTATTAAA
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CAGCTGAGGAGGTGCCCAAGGGCACTTTTCAGGCACTGGGGCCATCANCTGGTTCTCATTGACCTCT
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SEQ ID NO: 3762 ACCCTTTGGATTTCAAACAGTAACATCGGATGTAAACAAACTTAGTTTCTTTT
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CAAACCTGTGCAGATGATGAAACATGGNGGCCACGTTCTGTATTGGGAAACATTGACAGTTCAAA
TTGTAAGATCATTAGAGCTTCTTTCAAANTAAGCATTCTCAGCATGTTTCACTTCTACTNCCCAAG
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GNCACANTGGACTAATGCCAGACCATGGCCTATGCCCANNGTCAAACNTTCATTTCCAAATTTT
AGGTGGA

SEQ ID NO: 3763 ACCTTCTGGGGCATAACAACATGGCAGCAGGGCCTTGGGAAGAGGGGTNGGA
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CNCGTTNTTCCACCAGAATTTTCTNGCCTCCTTTT

SEQ ID NO: 3764 ACCANATACTTGCATGTAGAAGGAGGTAATTTTCATGCCAGTTCACAGCAGT
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ATGGCTACATCCATTATGGACAAACAGTCAAACCTGTGTGCTCAGTTACTGGCATGGCACTCCCAA

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AATAATTCAAATTTCANGCCACTCCATGTCCAAAAGAACAAATAAAGAGATGATANATGATGGC
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SEQ ID NO: 3765 ACTTTAAATCTGAGAAAGAATTCAAGAAAAAAGATTACATGTCATGTATT
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ANAACCTTCTCTGACAGACACGGTAACTAAATGTGAAAAACCAATAAGCTGGTGACTCATGAATA
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TTC

SEQ ID NO: 3766 ACGCGGGGGCGGNCGGCGTGTGTTGAAAGCGAGGCCAAAGTGGGTGGGAGCG
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ACATNTTGCTTGTTCGGNCACCCACTACCCATAGAANCNATATGANAATGAAGCCTGGCANGCT
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GCTNGTNAACTGCT

SEQ ID NO: 3767 ACGCGGGGGCTGACTCTCTTTTCGGACTCAGCCCGCCTGCACCCANGTGAAA
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SEQ ID NO: 3768 ACGCGGGGGAAAATGGAGGTATGAATTTGGGGTAAGAGGAAGTGAGATCTC
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GCCCAGCCCANCCCCACCCACAGATCCCCTGCTCCTGTTGTGTTCTGTTGTAAATCATTGGCGAG
ACTGTATTTTATTAAGTCTGCCTAACCTCCCTGTGTTCTATTTGAGAGGCGCCTGTCTGGATAAAG
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SEQ ID NO: 3769 ACACTCCCGTAATTTTAATAATATTTTAGGCAAGTCCATGACAATTATACCA
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SEQ ID NO: 3771 ACCGGCTTCTTCTCTGGGGTAGGGGTAGCCTCGCCCGGAAGCAAGGCCTCTG
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SEQ ID NO: 3772 ACCTCATAGTCAATNTNATTNTTNGCCGCGTTTANATGATNTAANGCANGAC
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SEQ ID NO: 3773 ACGCGGGGCTTTTGTCTGCGGGCACGCGCCGCTGCGGTGCTCAGGAACAGCC
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SEQ ID NO: 3774 ACCAGGTGTTAGCTGTGACCTTCAATGACACAAGTGATCANATTATTTCTGGT
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SEQ ID NO: 3775 ACCACCTGAGTTCCTGTCCAGGCCTATCAAGCCCTCCCCACCATACTTTGGC
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SEQ ID NO: 3776 ACGCGGGGCAGCGGCTCCAGCTAANAGGACAGGATGAGGCCCGGCCTCTCA
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SEQ ID NO: 3777 GCGCGGGGCGCATGCGCGGGGGCCATATTATCAGCGGTTATTCGGTGAGCGG
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SEQ ID NO: 3778 ACACCAACAGCAGGTCACACATTAACAGTTGTAACCTAAGCACTGTGACAAAT
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CANTTCACANAAACCAGGGCAGGATAGACNTTTACACCATTNTCACNNGTCTGAAGAGTATGGAG
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SEQ ID NO: 3779 ACACTTGAAACCAAATTTCTAAAACATGTTTTCTTAAAAAATAGTTGTTGTA
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GGGC

SEQ ID NO: 3780 GTACACGCTTTTGGCCCCNACCAATGAGGCCTTCGANAAGATCCCTANTGAG
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CTGGAGGTGGGCTGCAGCGGGGACATGCTCATTNTCAACNGGAAGGCGANCATCTNCAATAAANA
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SEQ ID NO: 3781 ANTGANTCTCNGCAAANAAAAATCTTGCANAGTCCTCCAAACCAACAGCTGGT
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SEQ ID NO: 3782 ACTCCAATATCTTTGTACCTCCCCAAGCCCTGATAACCTCCATACTCTGTTTG
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SEQ ID NO: 3783 ACTGATTTAATCAGTATAAAATCGAAAAGAGCTTTAGATCTGTAATAAAAAATC
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SEQ ID NO: 3784 ACTTGTGACAGGCAGACGTGATTGCAGCCACGAACACGATGAACTCACTGAA
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SEQ ID NO: 3785 ACTCCCTGTCGTCAAAGTGCTTCCTCTGGTAAATACACGGGTGCCAACTTAA
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SEQ ID NO: 3787 ACTTTTTAAATCATGTTCCCCCTAAACATGGCTGTAAACCCACTGCATGCAGA
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SEQ ID NO: 3788 GNACTTGGCCANGCGCTCANATCGGCAAGGGGCACCAGNCTTGATCTGCCNA
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SEQ ID NO: 3791 GGTACTACCACTTTTATGCTAGTTGGCATCTGCCTTTCTATACAAAGCTACTA
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SEQ ID NO: 3792 GGTACGTTTCATGACCAAAAATTTATCATCCTAATGTAGACAAGTTGGGAAGA
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SEQ ID NO: 3794 GGTACAGCTGACTATCCAACATGATTCCCTATGGAAACAGAAGGGGCAGAGTC
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SEQ ID NO: 3795 GGTACGCGGGGAGTGTGAAATCTTCAGAGAAGAATTTCTCTTTAGTTCTTTGC
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SEQ ID NO: 3797 ACGCGGGGGTCTTCGCTGGACACCATGAATCACACTGTCCAAACCTTCTTCT
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SEQ ID NO: 3801 ACCACGAGCAAAGTTGACAAAGGAGATCTCATCGAAGCGGATGTGCACAGG
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SEQ ID NO: 3802 ACGCGGGGCTCTTCTCGGCGCTGCCTACGGAGGTGGCAGCCATCTCCTTCTC
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SEQ ID NO: 3803 GGTACGCGGGGGCTCTCTGCTCCTCCTGTTTCGACAGTCAGCCGCATCTTCTTT
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SEQ ID NO: 3804 ACGCGGGATGACAGGGAACAGGTTAAGAAAACATGTAAATGTAGGAAAGA
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SEQ ID NO: 3805 ACCAAGCTGTTGGTGAAC TGCCCCAGGCCAACAGGGACACATTAGCTTTCCCT
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SEQ ID NO: 3807 ACAACACAAAATAATTGAAAATTCTCTCCACCTTTCCCAAATCAACCACTG
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SEQ ID NO: 3818 GGTACATGGGTGTTTCAATGCCTCCATTCCCTAAACCTGAGCAGTTGTCAGCTG
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SEQ ID NO: 3820 GGTACTACGATGGAAGATGCAACCCCAATATTAGAAAGGCAGCTTGATGAGC
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SEQ ID NO: 3821 GGTACTCAGCAATTCACAGACATGACATAAACATGACATTTTTTAAGACATAA
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SEQ ID NO: 3822 AACTAACAATTTGGATAAATCGGAAAGATGGATTAATTCCTACAAACATAT
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SEQ ID NO: 3823 GGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGATAAAACAAAATACTTTATTA
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SEQ ID NO: 3824 GGTACAGTATGGGGGTGTAAATTGGCATGGAAATTTAAAGCAGGTTCTTGT
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SEQ ID NO: 3834 GGTACACCATATAAACAGCAGATGAAGTCGGAGAGATAGTCTAATACACTTA
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TTAGGTGGGTAAATCAAGCTGCTGACATACAATTGCCTGTGTCTTTGTTTCATCTTTTCGGTCCAA
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SEQ ID NO: 3835 ACCGCGCTTGCGGTAGCTGGCCCCAGACTTCTGTCTTTTCAGCTGCAGTGAA
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TCACTGTTTACAGCTTTCTTCTGGCTACCATAATGGGTGTGAGATTAAANAGGTCCAAGAAAATA
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SEQ ID NO: 3836 ACTTGTTGACTAGAGTTCACTCTAGGGTGATCTATCTGTGTCTTTGCTGGGG
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SEQ ID NO: 3837 GGTACTACTTCTCCAACTCATAGAATTTATGGACACTTCTTCTTCATCCTGC
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SEQ ID NO: 3838 ACTCCTTCTGAACTGCCTCCAGGTCAGCCCCTGCCACGGCTGGATGTCTTCC
AACAAGACGTTGCGGACTCTCACTTCAGAGAGAGCAGAGCAACTCTCCAACACACTGAAAAAAT
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SEQ ID NO: 3839 GGTACATGTCACATATATAGTCAATGTAAAGCAATTCTACTTTGCATCCCTTA
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CCTGAACACACCATGTCAGAATTATGGCTAATCCCAAACCTGTAATAGAGGGATATCTGTGTATTC

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GAGATGGTTGATTNGCCTCTTAACCAAGANATTCATTGGCAGCT

SEQ ID NO: 3840 ACACTGGCTGTCCACAAGGCCGCACCTCACAAATCCGGGTTTCTTTCACAAG
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GGACCATGAAGTTGTTTGAACAATACATTTCTGGCCTTGTAAGGGTTGTATAGGATGCGAGGCTC
CATTCCAAAAACAGGGAGCCGCTTCAGTGAGCTGCCTTTTCCAAGTGAATCAATTCATTGTTTCT
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SEQ ID NO: 3841 GGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGNATATAAACTATTTATTAAC
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SEQ ID NO: 3842 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTGAANAATCAGAATTTATTTCACTATGTG
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CTGGACGGGAGCCTGTGGAAGTCCGGGGGTGCTGGGANGAAATAGTAATTTTGGAGGCCCTCGGA
CTTTGGCTCACTCTNTGAACGGATCCAGTTCCTGA

SEQ ID NO: 3843 GGTCCGGCCGAGGTACTTTTTTTTTTTTTTTAATGTTGCACTTGTAGTTTCATT
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CTCAGCTATAAATTCAAATTTATACATACTATTAGTATTAATATCTCTGAITTCAGGGAGAATTC
TGTCAGTCACATGATGATTATGTTTTTGTTTAA

SEQ ID NO: 3844 ACTCTGCCAGGCATTTAACATACATTATTTCACTTGTTTTCATGATTAAATTCA
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AATTTCTTGTAACAATGTAGAATTTAATTTTGAATTAACAAAACTCTCCCTAGGAGGAAT
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SEQ ID NO: 3845 GGTACGCGGGGCTTGCGGTGCTGGGCAGCAGACCGTCCAAACCGACACGCGT
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SEQ ID NO: 3846 GGTACTTGACAGGAAGTGTGGCGCTTGTGTCATTGTTGCTGCTCCAAGTT
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GAACAGCAAGTGGGAAAGACGCAGCAATTTGCCAGGAGGTCAAGCCCACCAATTTCCGGGGATCTG

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CCAAGGCATGCACCGGATTCAAGGTTCTTTTTGTTCCAGTTGTCAGATTCCAAACTAGACCCCAAT
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SEQ ID NO: 3847 ACATAATCGTTTTGTGGAGTCGGCACAGTTCAGGTTATGGAGGCACGTAATTC
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SEQ ID NO: 3848 GGTACTCTGTGAAGAACAGAAATGATCATATTCTTATGCATCTATCTGTATGG
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SEQ ID NO: 3850 GGTACTCCCAATATACGATAGGGTTCATGTTATAGGATTCAATTGTAACATTA
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SEQ ID NO: 3851 ACTGTTGTCCATTTTCATGAGAGTAGGCTTGAGGACACCATGGGCAAGGATCT
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SEQ ID NO: 3852 ACTGGCACGCTCTATAGCCAAGGAAGGCTTCGAGAAGATTAGCAAAGGTGCT
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SEQ ID NO: 3853 ACATCCAAAACCATAAGGAAATATTCTGATGCCCAGATGATGAAGACTGGGG
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SEQ ID NO: 3854 GGTACCTGCTACTTTTATGCTTGTGTCTTTAGATGAAGGTCCAGGTCCTCCAA
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SEQ ID NO: 3855 ACACCTGTGAATTCAGAGGATTCAGATACCAGACAAACTTCCCATTTACAAG
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SEQ ID NO: 3856 GGTACTTGCCCTTCCCCAGAAAAGCGGGACTTGCTGCTAAGGGTGAAGGAC
CAAGGCAGTTGTCCCTGCGTGGTCTGACACCCTTGAAACGTGGGTGTATAATCAGAGAGGCATCC
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SEQ ID NO: 3857 ACGCGGGGCTCTCTGCGGGGCTCACTCTGCGCTTCACCATGGCTTTCATTGCC
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SEQ ID NO: 3858 ACGCGGGGTCTTCTGCGGCTGAACCGCCCGGCTGAGCCGACATTGCCGGCG
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SEQ ID NO: 3859 GGTACAGGGGATTGGAACATGCTCCGCGCCTCCAGAGAAAAGTTGCTCCCG
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SEQ ID NO: 3861 GGTACTTGCTTTTGTAGCTGTTTTTTTGTAGGACATGTGATCATCTTAGATGTT
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SEQ ID NO: 3862 ACACCGTGGGCACCAAATACCGCAGCGAGTCCTATACGTGGTTCCTCTTCATC
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SEQ ID NO: 3863 GGTACTGGGGGTGGAGGGGTCCCCTCTTGCAAGTGTGGGGTACTGTTTGGGT
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SEQ ID NO: 3864 ACGCGGGGGCCCCATCCATGGACTCTTGCTCGGTGCAGTTTCCACTCTTGAC
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SEQ ID NO: 3865 GGTACAACCAGCCAGATTCCAAGCGGCGCCAGACCAATAATCAGAACTGGG
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SEQ ID NO: 3867 ACGGCAGCCACGAGGATGCGATGTATGGGACAAAACCTGGAGACCATCCGGA
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SEQ ID NO: 3871 ACCAGGGCGGCGCGTGGTCTACGCCGAGTGACAGAGACGCTCAGGCTGTGTT
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SEQ ID NO: 3872 ACGCGGGGAAGTCAGTTTTCAAAGGGCTGACCCTTGGCCTATTATGTTTCTGA
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SEQ ID NO: 3873 ACATGAAATTTTGCAATACTACATTCACTTTATTGTTCTTGTGTTTTGCATTTA
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SEQ ID NO: 3875 ACGCGGGGTCTCGCGAGATCCCTACTGGCTATAAAGGCAGCGCCCCGGAGAG
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SEQ ID NO: 3876 ACGCGGGTATAGGATTCTGTTCGCCGTGGTGCGCGAAAACGCCCAGTTCCT
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SEQ ID NO: 3877 ACAATACCAATTGATGGAAATTTTTTACATATACAAGACATGAACCTATTGG
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SEQ ID NO: 3880 GGTACCTGCAGGCCTCCTACACCTACCTCTCTCTGGGCTTCTATTTTCGACCGC
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SEQ ID NO: 3881 ACCAATGTCTAAATAAGGTTTAGAATAGATATAGCTTTCATTTTACTGCTCCT
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SEQ ID NO: 3883 CTCGGTCAAGTCTGCACGAGACAGCTTCCTGACATTCTCACTGGGCCCCCTCCA
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SEQ ID NO: 3884 CCCGGATGTTGCGGACAGTATGAGGCAAGCGCAGGGGGACGGGGACCAGCA
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SEQ ID NO: 3885 ACGCGGGGGATAAATTCATGAAAGAAGCCACGACGAATGCACCATTCAAGATC
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SEQ ID NO: 3886 GGTACTACACTGAAGACAGGTTGCTCACATACTCTAAAGCACATTCTTGATAC
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SEQ ID NO: 3887 GCGTGGNCNCGGCCGANGTTNNCNGGATCGANATGAAGGTNCAAGACCNGA
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SEQ ID NO: 3888 ACTTTTTTTTTTTTTTTTTTTTTTTTGACCACACCTGCCCTTTATTGGTCTCTTCT
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SEQ ID NO: 3889 GGACTTTTAATCACTTACTGAGAATATTTCAAATTTATATTCTCATCAGGAAA
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SEQ ID NO: 3890 ACTTGGGGAAGCCATCTCTATCATTTTTCTTGTA AATCTTTTCGGGTCCATGC
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SEQ ID NO: 3892 ACTGTGCATTTCTCTACTTGCATGGCCAATAAATACAGCTACGACCTGTTTG
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SEQ ID NO: 3894 GGTACCCCAATCTGAAGTCAGTAAATGAACTAATCTACAAGCGTGGTTATGG
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SEQ ID NO: 3895 GGTACTTATTNGGAAATNG
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SEQ ID NO: 3896 GGTACTGTCTGTCTTCACATTCATATTCAGATTTATATTTTCTGGAGTTAAAT
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SEQ ID NO: 3898 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTNGAAAATGTTTATGGTTTTTATTTTTC
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SEQ ID NO: 3900 GGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGGAANAATGTCATTGGTATTTTT
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SEQ ID NO: 3901 ACATGGCCGCCGTCCTGGAATACCTGACAGCGGAGATTCTGGAGCTGGCTGG
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SEQ ID NO: 3902 GGTNCTTTCCTGCCTTTTAGTTCCTGTGCACAGCCCCTAAGTCAACTTAGCATT
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TATTTATATTTTGCTGTAAAAAGAAAGTGAGCAGTGTTAGCTTAGTCTCTTTTGATGTAGGTTA
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SEQ ID NO: 3903 GGNACAGTGATTTGGCTATAGACTCTCGCCCCTTCAGGGCANACTGTCCTCAG
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SEQ ID NO: 3904 GGTACTTCTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGTTTTTTTTTTTTTTTTTTTTTTTTTT
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 AAGAAAAANTACCCNTTTTGTAAAGNGGCTNTTTGTTGNAAGCTGGNCCCAATNAATNAAAAT
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SEQ ID NO: 3905 GGTACACTGCCAGGCAAAGCGTCCGGGCAGCGTAGGCGGGCGACTTAGATC
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 CTCAGCTTCAGGCACCACTGACCTGGGACAGTGAATCGACAATGCCGTCTTCTGTCTCGTGGG
 GCATCCTCCTGCTGGCAGGCCTGTGCTGCCTGGTCCCTGTCTCCCTGGCTGAGGATCCCCAGGGAG
 ATGCTGCCCAGAAGACAGATACATCCCACCATGATCAGGATCACCCAACCTTCAACAAGATCACC
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SEQ ID NO: 3906 ACTTTTTTTTTTTTTTTTTTTTTTTTCAGNCTTGATGTGTGATCTTTATTTTGTA
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 AGTAGCTGCACATGTTCCGTGACAATCTGTCTGAGGTCTGTCAATTTCTGGAGCAGCTTGGCAAAC
 AGCTGTGAGGACTCAGGGTGGTTCAGCTTCAGCTGGAGCTCCAGGGCTTGTAGCAGGTTGTCTTGA
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 NCA

SEQ ID NO: 3907 ACACAGAGTAAAATGTTTTCTTTTTTTCAGGACCTTGAAGTGAATCTTGCAGT
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 AGAACCTGAGGTTCTAAGAGCAGAGAGTCCATTTCTGCAAAGGAGATAGCAAGGTCTGGTTGT
 CTCCCCAGACTGCTTCTGGGTTGTAGCCTCATCAGCTCTTCTCCTGGAGTGAAGTCAACCTGGGCCTG
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 AGGGAGAGCANGAGTGGATATATGTCCCGCGTTCCACAATGGTTTATTNAAAGGAATGTATGGCC
 CACATCAACCTANCAAGGATTCTACTGGTAAACCTTTCCATGGCCAAAGGAAAAACAANCNNGAAT
 TGATTGCTTGGGGTGCNCGCAATGGAAAAAGGGCAAAGGGGTATAACTTAANGGGGCTT
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SEQ ID NO: 3908 GGTACTTTTTTTTTTTTTTTTTTTTTTCCATANAAAGGAGGAAAAATATTTATT
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 TCTAAACACTTCACTGATTCCCACGTGANAAGGCAGGAGCCATCTTCAAATCCACAGATTCCAAG
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 GTGAGGAGATAGGGAGTTCTTCTTGGCTGGCTGGCTTCATAATCCCTGGGCCCCGAGATAATTA
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SEQ ID NO: 3909 ACGCGGGGGCAGAGCTGCGGAAGATGAATGCCAGAGGACTTGGATCTGAGC
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 CAAATCTTTCACTGGATGTTTTGAGGGGTAATGATGAGACTATTGGATTTGAGGATATTCTTAATG
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SEQ ID NO: 3910 GGTNCCATCTGCGCCATCCTGGAGAACTACCAGACAGAGAAGGGCATCACTG
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CAGGGAAGCCAAGCACCCATTTCATCCCCCTGCCCCATCTGACTGCGTAGCTGAGAGGGGAACAG
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SEQ ID NO: 3911 ACACAAAGAGGGGGTGGGTGTGCGGATGCAGAGTGTGTGGCCTGATGCTCCAC
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SEQ ID NO: 3912 ACCTTTGGGGCATGGGGGCATTACATGGGATGCTTGTGTAATCGACCACCTA
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SEQ ID NO: 3913 GGTACTATGGAATTCCATTTATGGAAAGTTCAACAACCTGGCAAAACTCACCTT
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CAGCCCCGTCTCTTCTTCTGCTAGCCTGGCTAAATCTGCTCATTATTTTCAGAGGGGAAACCTAG
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SEQ ID NO: 3914 GGTACAAAATTCAAATACCAACAAAACCTGATCTGTGATGATAGAAAGCATAT
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SEQ ID NO: 3915 ACAGTGTTCCAGCCATCCTGCTTGTTTTTCCCTCCAATACCTCCCAGAACAG
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SEQ ID NO: 3916 GGTACTTGGGATCCCCAGTTCCAAAGTGTCTTAAAGTGTGCACTTCTTCCAC
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SEQ ID NO: 3917 GGTACAAAGGCAAAGTAGAATAACAAAAAATATTTTACTAAAACATAAGATT
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TTAGCTGCTTTTAACCAATGCAATTAGATCACCAAAAAAAGGGGGAAGGAGCCCATAAAAATTA
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SEQ ID NO: 3918 GGTACTTGGATTATGGAGAAGAGAATTGGAAGAAACAGACATCTCAGTGCTT
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SEQ ID NO: 3919 ACATCTTCCAGAACGTAATGGTCATGATCCTGGTCTGGACACCAAGATCTTG
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SEQ ID NO: 3920 GGACCTCTGGACCCACTCCTGCTTGGGGTCGCCACAGAACTGCTGGCCCTTCT
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SEQ ID NO: 3921 ACTTTTTTTTTTTTTTTTTTTTTTTTGGGGAAACCATTGATTTTTTATTAATTTTATA
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GCCTTTTTGCGNGGAGTTTTTTTCAACCANAACCCAANCANGGNTTTTAAAAAACCCCANCTTTCC
CAAANCCCTNAAAAAACCTTGATTTTCCNTTCAAAGGAA

SEQ ID NO: 3922 CTTAGCNTGGTGCGCGGCCGNGGGNCGCGGTATCANANCCATGCGNAGAGT
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CTCCTGGACCCCTCAGCTGGTGCCAGGGGGTGGGGCCTCCGAGATGGCTGTGGCCCATGCCTTGNC
AGAAAAATCCAAGGCCATGACTGGTGTGGAACAATGGCCATACAAGGGCTGTTGCCAAGCCCTA

NANGTCATTTCCTCGTACCTTGCTTATGGCAAGCATTNGTCTATTTTGCANAATGTTCCATGTGTAA
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SEQ ID NO: 3923 GGTACGCGAAGGATATCGGTTTCATTAAAGTTGGACTAAATGCTCTTCCTTCAG
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SEQ ID NO: 3924 ACAAAGCTAAAGAAAAATTGTGGTCATTGATGATGGAATATATGACTTGCGAG
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CAACAGTCTCCCATCTGTATTCAATGGCGCCCCCAATACAGTCCTTTGTTTGGATGCTGGGGAGAG
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SEQ ID NO: 3925 GGTACAGACAGCTGGTGTCAATTTTGACACCTGGGGCCACACACAAAGAAAGC
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SEQ ID NO: 3926 ACTTACTTGGAGAGACATATGTCTGAATTTATGGAGTGTAATTTAAATGAACT
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SEQ ID NO: 3927 ACTGGATGTCAGGTCTGCGAAACTTCTTAGATTTTGACCTCAGTCCATAAACC
ACACTATCACCTCGGCCATCATATGTGTCTACTGTGGGGACAACTGGAGTGAAGAACTTCGGTTGCT
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CTGGTGAGAATCATCAGTGTCTATCATCATCAGAGTCCGTTCGAGTCAATGGAGTCTGGCTGTC
CACATGGTTCATCATCTTCATCATCCATATCATCCATGTGGTTCATGGCTTTTCTGGTGGACTTACTT
GGAAGGGTCTCTTGTAAAGTCAATGGTTTCTTCAGAGGACACANCATTCTGTGGGGCTTAGGA
GATTCTGCTTCTGAGATGGGGCAAGGGTTANCCATGTGGNCCCCACATCTGGGTATTTGTTNNNAA
AGCTGCTTTTTCTCAAACTTTCANAAAAACCTGTTTAACTNGGTTTGGCNCACGGNAATGCCT
NNGAGGCAAAACCCAANTACCTGGCAATTTTTATGGNG

SEQ ID NO: 3928 GGTACTGAGGAGAACTTCATGATGCTGCCAGCAAGCTGCTTAACACAGTTG
AAGAACTACAAAAGATGTATCTGGTCTCCATTCCAAACTGGATCGTAAGAAGGCAGTTGACCAA
CACAATGCAGAAGCTCAGGATATTTTTGGCAAAACCTGAATAGTCTGTTTAAATAATATGGAAGA
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GATTTTTCCCCCTGTGAACAGGCATGTTGTATTATATAACATATCTTGAGCATTCTTGACAGACTCC
TGGCTGTCAATTTCTCAGTGGCAACTATTTACTGGTTGAAAATGGGAAGCAATAATATTCATCTGA
CCAGTTTCTCTTAAAGCCCTTTCATGATGATGATGATGGGACTCAATTGTTTTTTATTTCCGTCA
CTCCCTGATAAAAAACAAAATTTGGAGAAATAAAAAATATTCAAAAAAA

SEQ ID NO: 3929 GGTACTGGGAAAAGATCTAATCTGCCGTGGGCCTGTCGTGCCAGTCCCTGGGG
GCGAGATGGGGGTAGAAATGCATTTTATCTTTAAGTTACGTAAGATAACAAGTTTCAGACAGGGT
CTGAAGGACTGGATTGGCCAAACATCAGACCTGTCTTCCAAGGAGACCAAGTCTGGCTACATCC
CAGCCTGTGGTTACAGTGCAGACAGGCCATGTGAGCCACCGCTGCCAGCACAGAGCGTCTTCCC
CCTGTAGACTAGTGCCGTAGGGAGTACATTATTTCCAACAAGCTTAAGACTTACCATGAATGGGCT
CATTCATACAAAAACACACTCACACTAATCTTTTAAAACAGTAGTGCATACATTATACTCCTCCT

ATAAAGCCAACTTTGATTAAAAACCACTNGTTTTCAAAGCTCAAGTCTTTGATTTTGAAGAAGAAC
CAAGATATCCCCCTATGATCCTACCATCTATTTTANGNCTTTTTGGACCATCTTGACAGCTTNCAG
GGCAAATGGTTGCAGCCCAANATTAAACNCCCCACTNATTGGNTTTTGG

SEQ ID NO: 3930 ACATCTCCGCTGCAGATCGTTTCACACCTGCTTTTCCTCGGTTCACTTNTGGCT
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GGGAGGGGAGAAGAGATTNGNTTCTGAGTCTNCTACTCCCCGGGTCTGCNTNAAAAAACCTCT
GCTGGTTGGAGGCCGNAACGCGGCCCAACGGTTANNTTTTNGCNTTTTAAAAAANTNCCCCGG
NCCTTTNTTTNTTTNTTTNCTTTTTTAAAAAACAG

SEQ ID NO: 3931 GGTACTTTTTTTTTTTTTTTTTTTTTTTTGGTCACTAAATTTATTTTAAAAATCATA
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CACAATAATTACATGGGGGGAATTTTTTAAACCAACAATAACGAAAAATAAAATCCACTCAC
TCTGCTGCTGTTTCAAATTTCAATGTTAGTTTTTGCACGCCCTTCCCCCCCCCAACCTGTTTGT
AGGAACATAAACATTACATNTGGTGAACAGCAAGATTTCACTNCACTCAAATGCAGAACACCT
ATGAAGCCAGAGGAATGTTGGCTTTTTTAAACAGAAAGCNGATNAAAAAAGATTTCAGGACTCCT
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SEQ ID NO: 3932 GGTACACCCCAACCCCAACCTCAGTGGAACAATGCCAGGGATTAGGCT
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ATGTCCTTAGCTGGTGGGGGAAAGGTTGGCGATCAGGAATACATATGTGTAGTTTTTGTAGAAC
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GATTATTAATTGGGCCCTAATTTAGAAAGCAATGCTGTTTTTACAAATTTGGACCTGACTTTAAAG
AACAAAAACAAAAAACAAGAGTAGAAAAATTTATGCTAAAAAAGATTTCGAATGAAACAA
TCAGTAGCACATTGCATCTGTTAAGTGTCCCAANCTCCCTGTAATGGTTATGTTTCCAACGGTTGGT
TCTTTCCAAGATAATGGTGTAGGTGTTACACCCCAATCTTTTCATGTNACATTCTGCAAGGNTCCT
TGCTTAATAACTTNTCATTAAACCNGNCTTGGAGTTTNTGA

SEQ ID NO: 3933 GGACAGACTGTTTTCCGGATGGACTGGTTTGGGAACACTGTGCTGGGGGAAG
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CTGGAGGGCCATTTCTACCACCCTAGCATGTCTGACAGAAAGCCCTGCTGGACTCTGGGGTCCAG
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CAGGGAGATTTCTCCACTGCACACAGCACAAGTGTCTTACATGTGCTGCTGGTGGAGCAGAGGG
AGCGGGAGAGGACCACGGGTCAGGATCCTGTCACCACCAGCCTGAACAGACAGTCCCATCTTTGT
GATCCAGGTGACAAATAATCAATTCCCTTGTCCTCCANCAATTGACCTTACCANATGGTTTTGGGGG
AGCTTNTTACCCCTAAANAATTTAAGTCTGGTTTGCTAATTGACTTATTTTTTTATTTTGAAAGTCT
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SEQ ID NO: 3934 GGTACTTTTTTTTTTTTTTTTTTTTTTTTAACTTTCAATCTTTATTTAAATGC
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TTGAAGTTTCTTAATTCCGTATCCCACTGGAAGTAAATGAGCCCCANACTAAGCCGTCTGC
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AGTAAGATGGAANACTTGGCAACAAGGGCAGGNTTTTTGGCTTTCTTTGATTNAAATTTGGGCAN
AACGTTCTTCCCTTANCCCTCTTGCTTCTTCACTTCTCCTCATCATCAAGACCCAAAGAGGGNCA
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SEQ ID NO: 3935 ACCTGTGAACCAAGTGTGTTGGGCAGGATGAGATGATCGACGTCATCGGGGTG
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CCCACCGAGGCCTGCGCAAGGTGGCCTGTATTGGGGCATGACATCCTGCTCGTGTAGCCTTCTCTG
TGGCACGCGCTGGGCAGAAAGGCTACCATCACCGCACTGAGATCAACAAGAAGATTTATAAGATT
GGCCAGGGCTACCTTATCAAGGACGGCAAGCTGATCAAGAACAATGCCTCCACTGACTATGACCT
ATCTGACAAGAACATCAACCCTCTGGGTGGCTTTGTCCACTATGGTGAAGTGACCAATGACTTTT
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TTCCAAATTTNGGCCATGGGCCGTTTCAAAACATGGANGAAAAAAA

SEQ ID NO: 3936 ACAAGCTGAGTATCCCTTATCCAAAATGCTAGGGACCAGAAAGTGTGTTTGGAT
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AAACCAGCTGTGGATTTCAAAACACAGTGTATTCTAANATCATCTAAAATCCATGCCGGATTTTA
TTGCACAANAATTAAGGTTGGAACNTTTGAGCTGGNACCTCANCAAATAAAAGTATATNTTGG
TCANTATTTTTTTTGGAAACATTTTANTTAATGNNCCGGGG

SEQ ID NO: 3937 GGTACAGATATCTTCAAAGGAGGAAGAAGAAAGGGAAAGCAGATGGTGGAG
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CACTCTCATGAGNGCAACTGTGGCTTACCTAATATTGCAATGNGGTTTGAATGTAGGTAGCATCCT
TTGANGCTTCTTTGAAACTNGTATGAATTTGGGTNTGAACAGATNGCCTGCTTTCCCTTAAATAAC
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AAAGGGGCTTGAAATTTTTTTTTNGTCAAAAAATTAATGCCNCCTTTTANAATATTTTTTTCNCCCA
CTTTANAAAGGGTTTTNTATATTCGNTNCNTTTGAAAAACC

SEQ ID NO: 3938 GGTACATTTAAGAATAAACTTTTGTAAAAAAGAAAAATCTTACAGTGGCTC
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CANAACTTGCCANAGTCTGTTCTTTGGTCCCTGTTCTACCCTAAACTTTGTATCACCTGAAATTA
ACCAACTCATTGCAAAAAAAAAAAAAAAAAAAGTCCAAGCCTGGAACATTGAAGGACTCAA
ACATTATTTCAAGCAGTATATCCCTGTTTTCTGGAGTATTCAATGGGAGGTTTCAAGTCAAAAANAAA
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SEQ ID NO: 3939 ACATCAGCAGCAAACCTCTGTGCATCCCGGTAATCACGGTTCTCCATCTTCCG
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AAAATGCCATTGCAATGTTTTAACTGTTCTGAAAGCTTTCTTCTTANAGCTCTGGTGTGTTGCT
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TGTAGGTGTAAAGGGTGGGTAANTATCTGCTTTTCCCTTTACGCCTTTTTCTTTGGCAANGGGGCT
TGGCCTGGAAGGANCCTCCAGTAACCANCCAAGGAGCCGGGGTCCACCAAAAATNCAAAGGAC
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SEQ ID NO: 3940 ACTTGTCTATATTGCAAAAGTCTTGATTGAGGTGGTGGCATTTCAGCTAGTTC
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GAGCGACACTCCCATGTATACGATCTAAAGCCTCCCTTATAAGTAATCCCGAGGGGTCTCATCAA
TGAAAGCTATTCAAAATGTGAAAGGAAGAATGGGGCCCGGTTGTGCAAGTGGCTCTCAAAANGA
CTGTGGCCCTTCTTTGCACCATGGGAAGGGGCTTCTTCTCCGGAATTACAAGCTTTTTGCAAGAAG
GAAACTTGGGCCCATTAANCAACTNCCTNTTAAAAA

SEQ ID NO: 3941 ACTGCATGTTCTGTTGTGGTGAGGGAAAGAAACATGCTTTGAAGGTTTTCCCT
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CAACCCTGCAATGAAATNGNNTCCCCCAAGCTTATNTTT

SEQ ID NO: 3942 TGTACGCGGGGCTTTTTTCTAACTCCGCTGCCGCCATGGCTCCTGTGAAAAAG
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GAACGGAAAAAGCTGGGAACCTNNGTGGAGGGGGGNGACCATNGAAAGGAGCAAGAGCAAGAT
CACCGGTGACNTCCNANGNTGTCTTTCTCCAAAAGGTATTTAGAAAATATCTCNCCANAAAATTTTG
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GTGT

SEQ ID NO: 3943 GGTACAGAGAAGCACCTATTGACAAAAAGGGGAATTTCAATTACATCGAGTT
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SEQ ID NO: 3944 GGTACTTTTTTTTTTTTTTTTTTTTTTTTTTCTGGAAAAGTGACTGCTTTAATG
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SEQ ID NO: 3945 GGTACGTGCAGACGGTGGTAGTTCTGGAGTCCTGGAAGCCACGAGGTGCTCA
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CCGCGT

SEQ ID NO: 3946 GGTACAAAACACAACAAAGGTTCAAACATCGAGATGTTCCCTTAGCAAGGCT
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SEQ ID NO: 3947 ACCAAATGTCACACTGGCTGTAATCAAATCGCCCAAGAATAGTCACATTAGA
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SEQ ID NO: 3948 GGTACCTTCAGTCTACACTTTAATCCCACTGAGTTAACTTGCAGCTCACAGCT
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SEQ ID NO: 3949 GGTACTCCGGCAGGGAGGGTGACAAGCACACCCTGAGCAAGAAGGAGCTGA
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SEQ ID NO: 3950 ACAATAGAGTTAGAGCCAAGGTCCTAGAGGCGGATAGGTGGATTCTTGAGGG
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SEQ ID NO: 3951 CGAGGTACGCGGGGCTTGCAGGCAAGAGTGCTGGAGGGCGGCAGCGGCGAC
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SEQ ID NO: 3952 GGTACGAAAAGCGGCAGAACTAGCTCTGAAAACCTCTGAGCAAGGTCTGTGTG
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SEQ ID NO: 3953 GGTACGAGATGGCAGCCCTCCAGAGCCCTTCTATGGAGATAAGATGAATCT
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SEQ ID NO: 3954 ACGCGGGAGCTCATGTAGGTCTTGATTGGACACAGTGAGTTTCAGATGACAG
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SEQ ID NO: 3955 ACAGACAGGCTTCTCTGCTATCCTCCAGGCAGTGTAATAGTCAAGGAAAAGG
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SEQ ID NO: 3956 ACNNGGGGGCNGCCGAGGCGTGCACATGCTCGCCAGCCACCCCCAGGACG
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SEQ ID NO: 3957 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGCAAAGTGCTTTATTTACACAGAGC
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SEQ ID NO: 3958 ACGCGGGGGCTGACTCTCTTTTTCAGACTCAGCCCACTTGACCCCAAGTGAATT
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SEQ ID NO: 3959 ACTGNTTACAACACAGCTACTCTTCTCAAAATAGTCCTTTTCTTTCTTGAG
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SEQ ID NO: 3960 ACGGCACTTGGCGTAAAGCCGCTTCCCTCAAGAGTAACTACAATCTTCCCAT
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SEQ ID NO: 3961 ACGCGGGGATTACGAGATTGGCTTGGATTCTGTCCGATGGACTTGGGGCTAG
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SEQ ID NO: 3962 ACTTTTTTTTTTTTTTTTTTTTGGCGTTTCCACACCTGCCCTTATTGGTCTCTTCT
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GGGNTNGNTCCCCCAGACGGAATNTTANATNTAAGATNTC

SEQ ID NO: 3963 GGTACTTCCCAGGAACCTGGGGACCTACGGGATATCGGGGCTGGCAAAGGCAA
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CCANACACCAATGAGTCNNCTTTCTTATANTCTTAATAAAAAACAAAGGTNTTAATNTTAATGT
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SEQ ID NO: 3964 CGAGGTACATTTCCCCGGGAGAACTCGTCCATTCCGGTGGTGGCGGCCGTTATT
GGTGGTGAAGACCCGTAGCAACAGTGGGCATGTCTTCTCGCGGTCGATCGGTTTCTCTGGCTCCTT
CTTAATTTCTCTCTGGGTAACGCGCGACTCCACCGCCATCTTCTCTACGGCCTGCGAGACGCTC
CCCCGCGT

SEQ ID NO: 3965 ACTTGTTGACATTAGAGGAGAAATGCCAAGGAATTTAAGAGAATACATGGTT
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SEQ ID NO: 3966 GGTACATGACAAGGTGCGGCTCCCTAGGCCCTCCCCTCTTCAAGGGGTCTA
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GAAAA

SEQ ID NO: 3967 GGTACTTTTTTTTTTTTTTTTTTTTGGCAAGCACGTGCACCTTATTGAATGACAC
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SEQ ID NO: 3968 GGTACTGCAAGTCAAGGGGACTCTTTGCAGGCGTGTCTTTAGAAGGGAGCTG
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SEQ ID NO: 3969 GGTACACTGTAAATGCTCAATAAATATTGATGATGGGAGGCAGTGAGTCTTG
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SEQ ID NO: 3970 ACGCGGGGAAACGACAGGGGAAAGGAGGTCTCACTGAGCACCGTCCCAGC
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SEQ ID NO: 3971 ACACTGCCAGGCAAAGCGTCCGGGCAGCGTAGGCGGGCGACTCAGATCCC
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SEQ ID NO: 3972 ACCTGCAGGCCTCCTACACCTACCTCTCTCTGGGCTTCTATTTTCGACCGCGAT
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SEQ ID NO: 3973 GCCTGTGCAGTGGGACTGATTGCCGTGGGTGTCGGGGCACAGCTTGTCTCTGA
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SEQ ID NO: 3974 ACGCGGGGAGAGGACGAAAAAATAACCGTCCGCGACGCCGAGACAAACCG
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CCTGCCTACTCAGAGCTCTATCGTCCGAGCTTTGTGCACCCAGGGGCTGCCACAGTCCCCACCATG
TCAGCCGCATTTCTGGAGCCTCTCTGTATCTTCCCATGGCCCAATCTGTGGCTGTGGGCCTTTAG
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SEQ ID NO: 3975 ACCGACCATAGAGCAAGAATCAAGATTCTGCTAACTCCTGCACAGCCCCGTC
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SEQ ID NO: 3977 CGAGGTACGCGGGGGAGATGGCAGATGAGATTGCCAAGGCTCAGGTGCGCTC
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SEQ ID NO: 3978 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTAGTATCGATCTCTTTAATTTTAGGCC
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SEQ ID NO: 3979 GGTACGCGGGCCTTGCTCCTGTGTGCTGTCTAAACCACTGGTGGATGAATACT
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SEQ ID NO: 3980 ACTGTTGTCCATTTTCATGAGAGTAGGCTTGAGGACACCATGGGCAAGGATCT
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SEQ ID NO: 3981 GCGTGTGCGGGCCGAGGTACAAAGAAAGTTTTAAGTCAAGGCCTCACCAATT
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GGGTCCCCCACTTCTCTATTATAACTGCTCTTAATTGCTGGTGGGCTGGCTGTGAAAATGGATGGA
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GAACAAC

SEQ ID NO: 3982 GGTACGCGGGGGTGGCAGCTTCGGATAAACGCAGGACTCCGCCCGGCAGCCC
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SEQ ID NO: 3984 ANTTGTGACAGGCAGACGTGATTGCAGCCACGAACACGATGAACTCACTGAA
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SEQ ID NO: 3985 ACTTGTGACAGGCAGACGTGATTGCAGCCACGAACACGATGAACTCACTGAA
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SEQ ID NO: 3986 ACCGACGTTGAGGTGGCTGCTGACCTTGGGTCTCATCTCCTTGATTTCTTTAT
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SEQ ID NO: 3994 ACATGGCAATTAGAAGTTGTCATGGCAAAAGAAAACCACAGCTGGCCTGCCA
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SEQ ID NO: 3995 ACGGGCTCATGAAAGTGTTGTGAAGAGCGAAGACTTTTCGCTCCCAGCTTAT
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SEQ ID NO: 3996 GCCGTGGGCGCCGNCAGAGNCCAGACATTTTCAAAGTTGCCAGTGTTACTT
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SEQ ID NO: 3997 TTTTTTTTTTTTTTTTTTTTNTACTTTTTCTTTAGTTTATTGAAAGAAATGTTTA
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SEQ ID NO: 3998 ACTTNTTTTTTTTTTTTTTTTTTTTTTTTGGAGAGGCAGACCAGCTTTATTTT
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SEQ ID NO: 3999 CGAGGTACTTNTTTTTTTTTTTTTTTTTTTTTTTGGCTAACTGCTGCCACCACCAT
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SEQ ID NO: 4001 CGAGGTACACACCTTTGTCCACTGGGTAAATTATATTCATTATGCCCACTGCT
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SEQ ID NO: 4010 AACTGCCCAGGCAAAGCGTCCGGGCAGCGTAGGCGGGCGACTCAGATCCC
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SEQ ID NO: 4015 ACGCGGGGAAACGACAGGGGAAAGGAGGTCTCACTGAGCACCGTCCCAGCA
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 NCGNCCATANNNNTNNACTTTGNNTTCACTTNGCAANGNTGGCCTTGNCNCTGGGGNTGNTGCCN
 TNCNCTNNGNNTNCCCTTNATC

SEQ ID NO: 4016 GGTACCATTCCGACGTTACAATGGTGGAGTTGGCAGGTGTGCGCAGGCCAAG
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 GGAGTAAATTTCAGCATTAATAATAATGTAATTTNTTGGGAAAAAA

SEQ ID NO: 4017 ACGCAGCCCCCTCACACACTGCTTCATTTTGTGATTTCTGCATTTCAGCTGCC
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SEQ ID NO: 4018 GGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTTACTGGCTAACAGAATTTTATTGT
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SEQ ID NO: 4019 ACAATATCATATATCTGGTATACAAAAAAATCGCTCATTATTTTAGCCCTAC
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 TCTTACCTTTTTTTCATAACTTCTCTTAATTTTTTTTTTTTTTTTTTTTNNANAGTCTTCTCTGTCAACC
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SEQ ID NO: 4020 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTNGGCCATATCATTCATGACCAAAAAA
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 TTTCAATAATAGGCTAAGGAAANACATGTTTTTCTCTTTTAAATCTCTGCAACTCCAAAGTAACT
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SEQ ID NO: 4021 ACGGAGGAGTTCCTGGAAGCCTTCATGGATCTGAGCCTCCGGAATCTCCGTG
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 CCTGATCATGGTGGGATGTATCTTGTCTTCTTGGGCANNATCTNCNTGGGGATNCTTCATCCANGG
 ANACATGNACCAANTAGNCTNNGCCTGCCTACTAANAGGATGCCCNCCAGANNGATATCGGNTTT
 GTNGTTNTCTTTCTCA

SEQ ID NO: 4022 ACTGATTCATCACTGTCAGATTCTGTTCCAGACCCTGTCTCAGCCTGGGGCTG
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ANCTAATTATTTGTAATGAATTATNTTATAACANTTCTTAGCCCTTGCTTTNGG

SEQ ID NO: 4023 ACAGACATGGCGGCGGCTTTTCGGAAGGCGGCTAANTCCCGGCAGCGGGAA
CACAGAGAGCGAAGCCAGCCTGGCTTTTCGAAAACATCTGGGCCTGCTGGAGAAAAAGAAAGATT
ACAAACTTCGTGCAGATGACTACCGTAAAAACAAGANTACCTCAAAGCTCTTCGGAAGAAGGCT
CTTGAAAAAATCCAGATGAATTCTACTACAAAATGACTCGGGTTAAACTCCAGGATGGAGT

SEQ ID NO: 4024 ACGCGGGGGAGTCACTGCTGCTCTTTGAGGCAATGCGCAAGGGCAAGTTTTTC
AGAGGGCGAGGCCACACTACGGATGAAGCTGGTGATGGAGGATGGCAAGATGGACCCTGTAGCC
TATCGAGTCAAGTATACACCACACCACCGCACAGGGGACAAATGGTGATCTATCCACCTACGA
CTACACACACTGCCTCTGTGACTCCATCGAGCACATCACTCACTCACTCTGCACCAAGGAATTCCA
GGCCCCGACGCTCTTCTACTTCTGGCTTTGCAATGCACTGGACGTCTATTGCCCTGTGCAGTGGGA
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GANCCCCATCTTCTNAAAAGCCTGTGTGCGTTANTGTGCTAAATACACANCCCCCNACCATGGCT
TGGCTGGAAGTAATTACGGGTAATTNATACCAANTTCTGTTGCCAANTCCTTGGAATTCT

SEQ ID NO: 4025 ACAGGCAGAGCAACCATCCTCTTCGTCACCCAGACGCAAGACAGTAAAGGA
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ACAGATTTACCCGTGCCAGTTTTCCAGCTGTCAATACTATTCTNGCATTATCATGGCTTAAATCN
CACAAATTNCTTGACCTTCTGCTACCC

SEQ ID NO: 4027 ACCTAAATAATGTCCTTCATTTTTGTCTTAGCTTGCAAAGCCTCTAATATTTGCT
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AACTCAAGGGTCTATGTCTGCTGTTTGTATTTCTATCTGCATTGCCAAATGCAGTGGCTCCTCTG
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AGNTAAAATTTATAAATAAAGGGATAGGAAAAATGCTGATTATTCTGNGTGNCGNGCTTTNAAT
ATAAGGCCANTTCNNACATGC

SEQ ID NO: 4028 GGGTACTCTGGTGAGTCACCACTTCAGGGCTTTACTCCGTAACAGATTTTGT
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ACTTAATGTATGTTACCAAAAAATAATATATCTACCCAGACTAGATGTANGTATTTTTGTATAA
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SEQ ID NO: 4029 ACTTTTTTTTTNTTTTTTTTTTTTTTTNGCAAGCCATATCTGAAAAGCCATCTCTG
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ACTTNAGGAAACTCCTTNTGGANAACATGGGANGCNCCTTNATAANTCTTGAAAGTT

SEQ ID NO: 4030 ACGCGGGGGCGTCTTGTTCTTGCCCTGGTGTCGGTGAGTTTCTGCGACTTG
TGTGGGACTGCTGATAGGAAGATGCTTTCAGGAAATGCTAAAATTTGGGCACCCTGCCCCAACTT
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AATATGTTGTGTTCTTCTTTTACCCTCTTGACTTCACCTTTGTGTGCCCCACGGAGATCATTGCTTTC
 AGTGATAGGGCAGAAGAATTAAAGAACTCAACTGCCAAAGTGATTGGTGCTTCTGTGGATTCTC
 ACTTCTTGTCATCTAGCATGGGTCAATACACCTAAGAAACAAGGAGGACTGGGACCCATGAACATT
 CCTTTGGTATCAAACCCGAAGCGCACCTTGTCTCATGATTATTGGGGTCTTAAAAGGCTGATGAAA
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SEQ ID NO: 4031 ACCCTCCAGAAATTGGTGACTTTGCTTTTGTGACTGACAACACTTATACTAAG
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SEQ ID NO: 4032 ACACAATGGTTTATTAAAGGAATGTATGGCCACATCAACCTAGCAAGGATT
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 ATGCACTNTTCTATACTGCTNNAGACAGCCAGAAACAGGGGANGAGGGAAGATTG

SEQ ID NO: 4033 ACTGCAGCTAAACCAGCGGCTTCAATAACAAGTAAGCCTGCTACACTTACAA
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SEQ ID NO: 4034 ACCTGGGGGGAGTTGTAACACTCCANAAGGTCCAACCTCCTCTCTTGGCATGG
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 TCACACTTTCCCCCAAATGGANGANAAGGGAGCNTGGTCAAATTACNANGAATCGNNTACCCTC
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SEQ ID NO: 4035 ACGCGGGGGAGCCAGCGCGGAGCACCTGCGCCCGGGCTGACACCTTCGCTC
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 TGGACAAGNCAAGCTNATGAAANGATNTTTTTTANCCTTATTAT

SEQ ID NO: 4036 CCGGGGGTAGACGGAACCTTCGCCTTTCTCTCGGCCCTTAGCGCCATTTTTTTGG
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SEQ ID NO: 4037 ACTACTGCTGTTTTCTGAAGACGCGAGGGCAAGTGCAGCCAGCCGTTTCTTTT
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SEQ ID NO: 4038 ACCTAGAAGAGAGGCGGGTCAAAGAAGTAGTGAAGAAGCATTCTCAGTTTCAT
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SEQ ID NO: 4039 ACACATGAGAGAAAAATCTTTCCAATGTAATGAGAGTGGCAAAGCCTTTAAT
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ACTTCATACTGGAGAGAAACATTACAAGTGCAGTGAGTGTGGCAAGACCTTCAGTCGAAATTCAG
CCCTTGTAATTCATAAGGCAATTCATACTGGAGAGAAATCTTACAAGTNGTAATGAATGTGGCAA
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SEQ ID NO: 4040 ACGCGGGGTCCGCCGCTAGTCTCCAGCTCCAAAATGGCGGCTGCCACTGTGG
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SEQ ID NO: 4041 ACTTGCAGCCCTCGGCCAAACGGCCAGACGCCGACGTCGACCAGCAGAGACT
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SEQ ID NO: 4042 ACATGACAAGGTGCGGCTCCCTAGGCCCTCCCCTCTTCAAGGGGTCTACAT
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AACTNAGGGATNACCTTGCCCACACCTTGCCANC

SEQ ID NO: 4043 ACNCGGGAGAAGAAGAGTAAGAAGGACAAGAAGGCCAAAGCTGGTCTGGAG
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SEQ ID NO: 4044 GTTTTTNTNTTTTTTTTGGCCCAAATTTATTTTTATTTTGCACACATAGGAAAC
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SEQ ID NO: 4045 ACCAAACGGGCAAGGACATCTCTACAAATTACTATGCGAGTCAGAAGAAAAC
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SEQ ID NO: 4046 ACTTTTTTTTTTTTTTTTTTTTTTNGCATCAAAAAGCTTTATTTCCATTGGTCCAA
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TNA

SEQ ID NO: 4047 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTNGGTTATTTTTAGTTAAAGAAAAACA
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SEQ ID NO: 4048 ACTCTGCCACAACTGATCACACTGCTTCTGGTAAGGGTCTGGCAGGAAGCT
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SEQ ID NO: 4049 ACCGACCATAGAGCAAGAATCAAGATTCTGCTAACTCCTGCACAGCCCCGTC
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SEQ ID NO: 4050 ACTGTTGTCCATTTTCATGAGAGTAGGCTTGAGGACACCATGGGCAAGGATCT
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SEQ ID NO: 4051 ACTGAGGACAAATCAGTTCTCTGTGACCAGACATGAGAAGGTTGCCAATGGG
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SEQ ID NO: 4052 ACTTCCCACTTTTCATAACGAGTNGGAGCCTAGAGTTGATCGACTCCAGCGAC
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SEQ ID NO: 4053 ACCAGAAGTATAAGTTTATGGAACCTCAACCTTGCTCAAAAGAAAAGAAGGCT
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SEQ ID NO: 4054 ACGCGGGGAAGGGGAGAGTTTAAAAACCCAAACCGTTGTGGTTTAAAGGTGT
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GCAN

SEQ ID NO: 4055 ACAAAAAAATTAATTTGCTTTAGTTATAAAAGAGCTCTGTCAATATACACA
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SEQ ID NO: 4056 ACCCCTGATGCCGTTGACAAGTATCTCGAGACACCTGGGGATGAGAATGAAC
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SEQ ID NO: 4057 ACAGCCAACGGTTTCCCTTGGGGGCTTTGAAATAACACCACCAGTGGTCTTA
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SEQ ID NO: 4058 ACGGTTTGGCCTGCAATGCTAATGGTCTCACAAAGCAGTCAAGGTATTTTGCTA
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SEQ ID NO: 4059 ACAGAACATGATCAAGGGTGTTACACTGGGCTTCCGTTACAAGATGAGGTCT
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SEQ ID NO: 4060 ACCACAAAGAATAGTCTCATTTGCACGAGAGACTCAAAATATTGGACTCTAGC
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SEQ ID NO: 4061 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTCCAAGCAGTATGTCTCAATAGTGGCCT
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SEQ ID NO: 4062 ACACACACGGGAAAGAAACTCTGCGAGTCTGATGTGTGTCAGAGTTCCAGTC
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TCAACAT

SEQ ID NO: 4063 ACCCAAAGCCTCCCCAAGGCCACAGTAGTCATGCTCCCGGGCAGTATCTGCC
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SEQ ID NO: 4064 ACAGTTTGCAGAATATATTCAGAAAAACGTGCAACTTTATAAGATGCGAAAT
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SEQ ID NO: 4065 ACGACCTCATTGCCGTGTCCAATCATTATGGAGCCATGGGGGTTGGCCACTAC
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SEQ ID NO: 4066 ACAGGTTTCACTATTACAAATATATGATGTAAACTAACAACTCATGACCTT
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SEQ ID NO: 4067 ACAGCTACCAAGAGGCCAGAAGGCAGAACTTATGCTGACTACGAATCTGTG
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SEQ ID NO: 4068 ACAGGTGCATCGTGCACATAAGCCTCGTTATCCCATGTGTGCGAAGAAGATAG
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SEQ ID NO: 4069 ACATTTACTGGATTGTTTTTCAGTTTGCAGCTGCCCTCTTGACATCCCAAATA
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SEQ ID NO: 4070 ACTTTTTTTTTTTTTTTTTTTTTTTTNGCAGTAAGAGTAGCCAGGTGTTAGCCAC
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SEQ ID NO: 4071 ACATTGAAGCTCGGGTGACAAAAGGTGAGACACTCACCTAGAACAGTGCCGT
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SEQ ID NO: 4072 ACGCGGGAGCCAAGAGGCGGATAAGTGCCCCACCTTAGAACAGTATGCCAT
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SEQ ID NO: 4073 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTCCAANATTTGTTTTATTTTATTATG
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SEQ ID NO: 4074 ACGCGGGGGGCGACTGAGCGGACAAACGGAAGTGTAGGTTACGGTCTGAG
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SEQ ID NO: 4076 CCCTAATGATAACCATTTTTAGAAATTCATCACTGTAGAATCAGAGTCTG
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SEQ ID NO: 4078 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTCTCAAGCACGTGCACTTTATTGAATGAC
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SEQ ID NO: 4082 ACTAGAGCGCAGAGTTTCAGACTTGGAATTTATAAATGCTTTCAACGTGTGGTG
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SEQ ID NO: 4083 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTATATAGGTCCCATTTTTACTGNGCA
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SEQ ID NO: 4084 ACGCGGGCGGGGAGGCTTTGGAGGGCGAGGAGGCTTCCGAGGAGGCAGAGG
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SEQ ID NO: 4085 ACAATGAACTGCTTTTCTCAAGCAATAATTGTTTCCAACCTTGTCTGGGAATT
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SEQ ID NO: 4091 ACTGCTATCTCGCATTCTTCTCAGGTTGCCAGGAAATGTTTCTCTAACCCCTTTC
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SEQ ID NO: 4092 ACAGCACTTCCGAAGAGTTTAGTTGGCCCTTTGCTGGTTGGGCTGAGTTTTTTT
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SEQ ID NO: 4093 ACGCGGGGTTGCTTTATTTCCATCAAAGCCCTCTGAGAAGTGAGACCTCAGC
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SEQ ID NO: 4095 ACGCGGGGGTGC GCGCGCGTGATCTGCCGCCGGGTTGCTGTGCGACTATTCT
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SEQ ID NO: 4096 ACAGGAGTTGTTGCATATTCCATGAGGCTGGTGTGCGGAAGCAGGGACCCAC
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SEQ ID NO: 4097 ACTTTTTTTTTTTTTTTTTNNNTTGGGGTATAAATACTATGCTTTAATGAGC
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SEQ ID NO: 4098 ACTTGAGGTAACAGTCATGGAGATCGAGATAACGACCATATCCCTCTTCATCT
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SEQ ID NO: 4103 ACAACAAAAAGATTAGGAAGCAAAATGTGAATAAGCTTGTATTTCAGAATATACCTATATGTGTGTGCAAAGACAATACACTCATCATATACCTCACTTAGGTTCTTTATGATGCATAATTCCTTAATCATTCATTTGTGAAACAAGAATGAATATTAAGAAACATGAAATCCAAATTGCACTTATTTTCACAATATCAATGCTAAACTCAAAATAGCAACTTCATTGACTCTCAATGGTAAATTTCAAAATGGAAGCAATCTTAATTTTTTTAACCCTTTGACTAGGGTCTGTAAAAAACGGTGGATTATTTACTGTACAGCATTCTGGAATAAAGCAAGAGTGTTCATTCACACACACAGTAGCTTCAAAACTGTTGATCTGTTTGTCCCATGTAGTTTTCTAAAGATGGAAAAAAGGACTTTTGGTCATCAAGACTACTGTGGCCATATTAGATTACTGGAACATCTAAGCATCAGTGTGTGACCATGCGAACAAAAGACTTCGGGGAGTGTCTATTTTTAAAAAGGTTTATGTGTGTCGAGGCAGTTGTAAAAGATTTACTGCAGAATCAAGCCCCCTTTTANGCTTAGGACCAGGTTCTAACTATCTAAAAATATTGACTGATAACAAAAAGTGGTCTTAAATGT

SEQ ID NO: 4104 ACGCGGGGTAAGAGCTTTCGAGTATACTGTATTATCCTTGTAACCCAAAGATGTGAGTCTTTGGGCTGCAGTAAAGGAGACTTGGACCAACACTGTGACAAAGCAGAGTTCTTCAGTTCTGAAAAATGTTAAAGTGTTCGAGTCAATTAATATGGACACAAATGACATGTGGTTAATGATGAGAAAAAGCTTACAAATACGCCTTTGATAAGTATAGAGACCAATACAACCTGGTTCTTCCTTGACGCGCCACTACGTTTGCTATCATTGAAAACCTAAAGTATTTTTGTAAAAAAGGATCCATCACAGCCTTTCTATCTAGGCCACACTATAAAATCTGGAGACCTTGAATATGTGGGTATGGAAGGAGGAATTGCTTAAAGTGTAGAATCAATGAAAAGACTTAACANCCCTCTCAATATCCCAGAAAAGTGTCTTGAACAGGGGAGGGATGATTTGGAAGATATCTGAAANATAAACAGCTAGCAGTTTGCTGAAATATGCTGGAAGTTTTGCAGAAAATGCCAAAANATGCTTGATGGAAAANAATNTATTTAATACCAAATCTGTTGGGCTTCTTTNAAAAAAGCAATGACTTATNCCCCCAACCANGTTAGTAGAAAANGCTGTTGTTCAAATATGGNTN

SEQ ID NO: 4105 ACCTGGCCATCCTGGGCAGTGTGACGTTTCTGGCTGGCAATCGGATGCTGGCCAGCAGGCAGTCAAGAGAACAGCACATTAGTTCAGAAAGAAAGATGGAAATTCTGAAAACCTGAAATGTCAAGAAAAGGAGTCAAGAACAAATTCACAGTATGAGAAGAAAAATGGAAAAAAACTTTATTTAAAAAGAAAAAGTCCAGATTGTAGTTATACTTTTGCTTGTTTTTCAGTTTCCCCAACACACAGCAGATACCTGGTGAGCTCAGATAGTCTCTTCTCTGACACTGTGTAAGAAGCTGTGAATATTCCTAACTTACCCAGATGTTGCTTTTGAAAAGTTGAAATGTGTAATGTTTTGGAATAAAGAGGGTAACAAATAGTNNAAAAAAAAAAAAAAAAAAAAAAAAAAAGGTCCCTGCCTATTTTAGAATCCTAGAGAACAATTCATTGTAANAACTAGTCCATTATTTAAGTGTCCAGTATTTTTCATTTTCAGTGGGTCCAAGATGCNAAGGTTTCCAGACACAATCTTGGTCTCTAATACTGCTCCAGGGTGGGATATCAATTCTGTCACATGATTTGCAATGATGATAACCGTTCCCTTTAATGAAACATTTTTTCCAAATGTCCACATNTCCTGNAAACTGNGGAG

SEQ ID NO: 4106 ACAAACATGACATTACAGAGTATCTTATAAAAATACAAAGACAAATATAAAAGGACTATGATGCTTTAAGTCTGAAAACCTATTGGCCAAATATTTAGGTTTAAATTTACAGTTCCTGGGTATGAGAATCATATTACTATATACATCTCCCAAACAGTAGGTAGTATTTTCCAATTAACCATGTGTGGTATCATCTTCTACAAAGTCTTTGGCCATCTCTGCTGTGATCACATCAATATGACTAACCTTATTCTGAACCTTACACCATAGAATTTGTCAGCTGACTCAAGCAGTTCAGGCCTAAAAGTAGTTGTAATAAAGTGAAGCATGT

SEQ ID NO: 4107 ACGCGGGGACGGTTCGTTTTTGTCTTAGTCAGGAAGGACGTTGGTGTGAGGTAGCATACGTATCAAGGACAGTAACTACCATGGCTCCTGAAGTTTTGCCAAAACCTCGGATGCGTGGCCTTGCCAGGCGTCTGCNAAATCATATGGCTGTAGCATTCTGTCTATCCCTGGGGGTGCGANCTTTGTATAAAAGTTTCTTGTGGCTGATCAAAAANAANAAGGCATACTCAGATTTCTACAGAAACTACAATTGTTATNGAAAAGATTTTGANNGANATNAGGAAGGCTGGTATCTTTNANANTGTAGAAGTATCTTTGGAATATAAAAGAATTNCTCCANGTTGANTAANCTAAAAATNANTAACTGANCTAGT

SEQ ID NO: 4108 ACTGGCCTGCTGCTGGCCCGCAGGCTTCTCAATAGGTTTGGCATGGACAAGAATCTATGAAGGCCAAGTGGAGGTGACTGGTGATGAATACAATGTGGAAAGCATTGATGGTCAGCCAGGTGCCTTACCTGCTATTTGGATGCAGGCCTTGCCAGAACTACCACTGGCAATAAAGTTTTTGGTGCCCTGAAGGGAGCTGTGGATGGAGGCTTGTCTATCCCTCACAGTACATCCAAAACCATAAGGAAATATTCTGATGCCCAGATGATGAAGACTGGGGTGAATTAAGTCCACACATTTATTTCAAGTTGTTAAAGAGTTTGTGGGCCACGCAATGGTCCCTCGCATGCAAGAAGTCAAAGAGCTCCTCCGTGCAATCTCTTCTGTATGTGATCGAGAGGATACACGCTCATCACAGAGCTCTAGCCGCTCCCGGGCCTTTACACATTTCTCCAACCTGCTCGCATTGCTCTCTCACTGTTGTTAGGGGATCCACTAATTCCTCCTCTTCTCTTCTCCTCCTNAGGATCTCCGGATTCCGTAAGCATCTTTTGCTCGTCTCATCCCATGTCTTGGCTACGGTTCTAGATTCAACACGAANCAGCAACAGCGGCACCTACCCANTTCANGATCAAAAAAGGACTTGTAAGGGTC

SEQ ID NO: 4109 ACGCGGGGGCGGCCAACATGGCGGAACGCAGGAGACACAAGAAGCGGATCC
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CTTTTGGATTCAAAGTGGGCAAAGGCCAAGAAAGGAGAGGAAGCTTTATTACAACCAGGGAGTC
TGTGGTTGACTACTGCAACAGGCTTTTAAAGAAGCAGTTTTTCACCGAGCCCTAAAAGTAATGAA
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SEQ ID NO: 4110 ACAGTAAGGCAGTAATTCCATTAGCATCCTGCTGTGGTTTTCTTTTCAAGTTA
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CCCTCAAANAATACTAAGCCNGTGGTGCCTTTTATTTCATTGAACACATTAGTTTTTTATTAACCTAA
CAGC

SEQ ID NO: 4111 ACGCGGGGAGCCGGGTGCTGATGCGAGTCGGTGGCAGCGAGGACATTTTCTG
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SEQ ID NO: 4112 ACCATACCACTTATAAAGTGGAACCTCTTGGACCAAGATTTGGATTAATTTGT
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SEQ ID NO: 4113 ACGCGGGGAGGCATTGAGGCAGCCAGCGCAGGGGCTTCTGCTGAGGGGGCA
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SEQ ID NO: 4114 ACGCGGGGGCTGTCGCTCACTCAGATTGTCCGTTTGCTATGCCGAATGCAGCC
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CCCCGAATATTGGTAAAGATCGANCAATGGCTTCAGGACATGGGTTCTCTTCTCCTGTGATCATTC
AAGTGCTTACTGCATGAAAGACTGGCTTGTCTCAAGTGTTCACCCTCACCAGGGGCTGGCTNTT
GGGTCCAAACCTTNGGTTCNCTGGTTAANTGCCGTNTTGAACANCCCCCAATCAAAANTGACCCTT
TGNCCC

SEQ ID NO: 4115 ACTAAGAGAAAAGCACGAAGCTGTGGATCATAGTTCCCAGCATGAGGAAAA
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ATGGGACAGATACTTCTTTCTCTGGAAGACTTATTCCAGTTGCTTTCATCACAGCCTGAAAATTC
ACTGGAGGGCATCTCATTTGGGAGATATTCCTCTTCCAGGCAGTATCAGTGATGGCATGAATTCCTC
AGCACATTATCATGTAAACTTCAGCCAGGCTATAAGTCAGGATGTGAATCTTCATGAGGCCATCTT
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SEQ ID NO: 4116 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTGCACAAGCACGTGCACCTTTATTGAATG
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TACCAGTAACAGGATGAATCCAATGGTTCATGAGGATGCCANAATCAGGGCCCAAATGTTGAGGC
ACTTGGCGGTGGAGGCATAGGCCTGGGCCCCGGTACGTCGCCAACCATTNTCTGTCCCTAGACT
TCACGGAGTAGGCGAATGCTATGAANCCCANACAGCACCAGTTCAAGAAGAGGGTGTGTAACAG
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SEQ ID NO: 4117 ACGCGGGTATAAACTATGGAGAAAAGTCTAAAGGGTATCCCTGACCTTTA
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SEQ ID NO: 4118 ACAAAGACAAACACCTAAAAACACACTGCGTCAAGTGCAGCACCGACTTTGGT
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GCTGCTTTGTCTAGGAATGGCCTATATTTCTCCCATAGTGGGACCTGTGCTGCAGGCAGCAATCAG
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SEQ ID NO: 4119 ACTTGCAGCCCTCGGCCAAACGGCCAGACGCCGACGTCGACCAGCAGAGACT
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SEQ ID NO: 4120 ACTTGATATGGAAAGAAGCTTTTTTCTTCTCAAGTTGGATGCAGAACTGAGT
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TAGCAAAACTACCTGATTATGCCCATGTTTCCCAAATACCTTGATTTTTCTTATATTGACATTTCA
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GGGTT

SEQ ID NO: 4121 ACCTATATGGCTCCCCCAATTAATCACAATTCAGCAGCATCCACTCCCCATAT
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SEQ ID NO: 4122 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGAGACGGAGTCTCGCTCTATTGGCAG
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SEQ ID NO: 4123 ACTTTTTTTTTTTTTTTTTTTTTTTTNGACAGTGCTTTCTACTTTATTAACATCAA
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GGCATCTTACGATTTGCTGCTATGGTCTTCANGAGGCCANGAAAAANGGTAGTGCTGCCCCCTGA
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TCAC

SEQ ID NO: 4124 ACGCGGGATCTGAAGAAAACCAAGAAGAACTAAGCATTGATAACTGCATTGT
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TAATT

SEQ ID NO: 4125 ACAAGTATTTATATCAATGAAAATTTCCATTGGTGATTTTTTGGCAGAATATT
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ATAAATCCTTCATTCCAGCTCCACGAGCAGATCCCCTTCTCCAAGTGTGTCTCCAGCTTGACAGTG
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CAAATTTCTTGACCTTCTGCTACCGCGT

SEQ ID NO: 4126 ACTGGTGTCCCTGGGTGCCAGTGAGAACTATCCTTGCTCTCTCTGGGGAATC
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SEQ ID NO: 4127 ACCCATGATCACAGGCCTTTGGAGCACTTTTACTCTCTGAGAAGAAGTGGAG
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SEQ ID NO: 4129 ACTATCATGTTGTTGAAACTGGGTCCATGGGAGCAAGATTAGTGGCTGCTAA
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SEQ ID NO: 4130 ACCGTGTCCCCTTCTTAGTGCTCGAATGTCCCAACCTGAAGCTGAAGAAGCC
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 TGCATCCAGCTTCTATTTACAATGGGAGGTTTAGGTTTCATAATCCTGGACCGATCGAATGCACC
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SEQ ID NO: 4132 ATGNCATTGCTTCGNAGCCGGGCCCCGCCAGTNGTGGNATGGGNATTATTCT
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NAAACCAAGNAATTTATTTANCCANCCAAGGAAAACCANTTNCCCCACCCCCAAACCAAACCC
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GTAACACAACCTATCAAAACCTCTGTGATCAGCAAAGGCAGTGCTAAGAGGAAAGGTTTCATAGCC
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SEQ ID NO: 4133 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTNCNCCCTATTNATTTGAGTTTCCTG
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SEQ ID NO: 4134 ACGCGGGGAAACGACAGGGGAAAGGAGGTCTCACTGAGCATCGTCCCAGCA
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SEQ ID NO: 4135 ACTATTTTCATGGTCCAAACCTGTTGCCATAGTTGGTAAGGCTTTCCTTTAAGT
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AATA

SEQ ID NO: 4136 ACTAGCCGGACTTGGATTTTCTGGAAAGATTTCAAGTTGAGGAACGGGAACAA
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SEQ ID NO: 4137 ACGCGGGGAATGAAGGTGATAGAAAACCGGGCCATGAAGGATGAGGAGAAG
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ACATCANACCTTGGATCAGACCTAACAACTTACTGTNTTTAACCAAAACAGAAAATCTTGTTCCAC
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SEQ ID NO: 4138 ACACAATGGTTTATTAAAGGAATGTGTGGCCACATCAACCTANCAAGGATT
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CANGCAATGGAGANAGGGCAGAAGGGTGTNTAAGCTGAAGGGGGCTAGAAGCTTACTCCTGAG
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SEQ ID NO: 4139 ACTGTATGTGTTTCTTGAAAAAGTCTTGTATGCATCTGCGAATTTCTTCCTTTT
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CTATACATGGATCTGGAGAATCATCAGT

SEQ ID NO: 4140 ACGCGGGGAGACATTCACAGCCAAAAGCCTGGGACTCTTTGTGAAGGTCCTC
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SEQ ID NO: 4141 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTACACAAAAACACTTTAATTGACAGTAT
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ATAAAT

SEQ ID NO: 4142 ACTTGGCCAAGCGCTCAGATCGGCAAGGGGCACCAGTCTTGATCTGCCCACT
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TACAAATTCTTAGATGAAGACTTTGTGTTTCGATATATACAGAGACAGTAGGTGGAAGGTGTGGNT
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SEQ ID NO: 4143 ACGACGTGATCGTGCTGGGCACCGGCCTGACGGAATGTATCCTGTCAGGTAT
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TGGCAAAA

SEQ ID NO: 4144 ACTTATTTCAACAATCTTAGAGATGCTAGCTAGTGTGAAGCTAAAAATAGC
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SEQ ID NO: 4145 ACTGCTACTTCTATAAACGGACAGCCGTAAGACTAGGCGATCCTCACTTCTAC
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GCAAACAGCTGGACTTTCCAAGGAAGGTTGAGACTAGCTATGTTGAGCATTCAAGAAGGAAGATC
CTCCCTCTTGACACAATTAGAGTGTCCCATCGGTCTCCAGTGCGGCATCCCTTCCTTGCTTCTTACC
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SEQ ID NO: 4146 ACTGTTTCTTACATGCGAATCTACAATTATCTCAAAATAAAAAAGTCTAATTTA
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SEQ ID NO: 4147 ACTTTTTTTTTTTTTTTTTTTTTTNTTTTTTTTTTTTTTTTAGGTCCAATGGTAGT
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SEQ ID NO: 4148 ACCTATTTGACTTACCATGGAGTTAACATCATGAATTTATTGCACATTGTTCA
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SEQ ID NO: 4149 ACTGCCATTCTTAAATTCATTTAGATTACAGTGTGTAATCATAACTTTTGATC
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GCAA

SEQ ID NO: 4150 ACTTCTTCAGATCGCCAGGATTCAAGAAGCCATAGTTCAAGAAGAAGTTCTC
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SEQ ID NO: 4151 ACCAGTAAATCAAAAAAGAGGGAGTATGTCCATTTAACTTTTATTGAAGTG
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SEQ ID NO: 4152 ACCAGCGCCGGAAGTTGGTCTCGACACCTGGACTAGCCGGGTTGTATTTGGA
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AGGGATCCAATCAGATGCAGAGAATGTGGATACAGAATAATGT

SEQ ID NO: 4153 ACCTTTTCATCTTCTCTGTGGCCAACATGAGGAACAGCAAGCTGAAGGACAT
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SEQ ID NO: 4154 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGCTTTTCTCCTCTCTCTCTCTTTGTCC
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SEQ ID NO: 4155 ACAAATGTTTTTATTCAAAAATACAAAATAAATTATCTGTAGGCATGGACA
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SEQ ID NO: 4156 ACGCGGGGAGGAGGGGCTGCTGAGATATCCTGTGCCCTGGCAGTTAGCCAAG
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SEQ ID NO: 4157 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTGCATCAAAAAGCTTTATTTCCATTTGGT
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SEQ ID NO: 4158 ACGCGGGGCCAGTAACAGGCATCGAACGGTGCAGACTGAAGACGCCCTCC
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SEQ ID NO: 4159 ACCCTGGCCACTCCTTTCCTTTTGGCTGGCCAATGTCTCCTCTGTAGGCTCCA
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SEQ ID NO: 4160 ACCAGTGGAGGAAGGCCTTCCGGCGGAACATGGCAGTGAAGTCTCCGAGAT
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SEQ ID NO: 4161 ACTTTTTTTTTTTTTTTTTTTTACAGGATTCCTTCAACTTTAATTGTGGGGGTAA
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SEQ ID NO: 4162 ACCACTCAATCTTTTAAAAAATGAAAAAGAAAAAAGCGGGCTCCAAAG
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SEQ ID NO: 4163 ACGCGGGGGGGAAAGGAGGTCTCACTGAGCACCGTCCCAGCATCCGGACAC
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SEQ ID NO: 4164 ACGCGGGACTCCTCAGCAAATGCAAAAGAACTAAAATCATAACAGTCTCTAG
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GCAGCCGGCTCATAAAGGTTTCATTTGGACAAAGCACAGCAGAACAAATGTGGAACACAAGGTTGAA
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SEQ ID NO: 4165 ACTTGCAGCCCTCGGCCAAACGGCCAGACGCCGACGTCGACCAGCAGAGACT
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AAAGT

SEQ ID NO: 4166 ACGCGGGGAGCTGGAGGCGGCGGAGCGGAAGCCCCACCATGGCTGCAATCC
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SEQ ID NO: 4167 ACTTTTTTTTTTTTTTTTTTTTTTTTGAATAAACCTGCAAGAGCTGCCTGTATTTA
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SEQ ID NO: 4168 ACAGCCTTGCTTCCCCAACTCCACAGTCTCAGTGCAGAAAGATCATCTTCC
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TATAA ACTG

SEQ ID NO: 4169 AAAAAAGACAGCCAGAGGTGTGCGGAGAGGGTGAGGTGGCCGCGTGGACG
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SEQ ID NO: 4170 ACGCGGGGCTCTCAGAACCTTCCTGCCGTGCGGTTTGCACCTCGCTGCTCCAG
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CAGGCTGGTCAGTGTGGCAACCAGATCGGTGCCAAGTTCTGGGAGGTGATCAGTGATGAACATGG
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SEQ ID NO: 4171 ACTTGCAGCCCTCGGCCAAACGGCCAGACGCCGACGTGCAGCAGCAGAGACT
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SEQ ID NO: 4172 ACGCGGGGGGAGTTAGGCGACCAAACCAAGTGAGAGCCCCAATCCCTGCAGTT
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TCCTT

SEQ ID NO: 4173 ACCAACAGACGTGGATAAGTGGTTCATCACCAGAAAACTAATGAGATTTTCT
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SEQ ID NO: 4174 ACGTGCAACCTTGTTGCTACGGCCACTATTCTTCATTTTGGTAGAGCCGAAC
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AACCCTCTCTTTGGATGCTTGTTCATCACTGGGTCCACTTTCTCCCTATGTGTATACATCTAAA
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SEQ ID NO: 4175 ACGCGGGGAGACGCGCGGGCGGGAAGATGGCGGCTGGGTTCAAAACCGTGG
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SEQ ID NO: 4176 ACGCGGGGGCTGACTCTCTTTTCAGACTCAGCCCACTTGACCCCAAGTGAATT
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SEQ ID NO: 4177 ACTAATGTGATCACAGAAAAATAGCAAACCTGAAGTCAAAAAGCACAGGCTG
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SEQ ID NO: 4178 ACTTATTTCAACAATTCTTAGAGATGCTAGCTAGTGTGAAGCTAAAAATAGC
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SEQ ID NO: 4179 ACCTTTTTTCTGAGCTCTGGTTTGCCTTTCTTGACTGTGGCCATCACCATGTCA
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SEQ ID NO: 4180 ACATCCCAGTGGGGACATAATCATTGCCGATTATGGTAATAAATGGGTCAGC
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SEQ ID NO: 4181 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAAAGATTTTTGAAACTTTTTATTTATA
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GATT

SEQ ID NO: 4182 ACAAATTTAATAAAGCCTTTGATCACATCTCAATCCATAAGTTAGCTACAAAA
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SEQ ID NO: 4183 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTCNAATCTGAAGTCTGTGTTTTACTAAT
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TAACTG

SEQ ID NO: 4184 ACCTGGGTGTTCCCCACCTTGGGCATCATGCACCACAACAAACAGGCCACTG
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SEQ ID NO: 4185 ACAAGTAACTGTTTAGAGCAAGTAAGTAGTTTGGTCCAATATTATCTTAATGT
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SEQ ID NO: 4186 ACGTGCAGACGGTGGTAGTTCTGGAGTCCTGGAAGCCACGAGGTGCTCATCC
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CCGCGT

SEQ ID NO: 4187 ACTTTAGGGGCTGCCATTGGGTATTCTTCTGGAAGGAATAGTTCAAGTTTAA
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SEQ ID NO: 4188 ACGCGGGGGGATGGTTCCATCATGGCGTCAATGCAGAAACGACTACAGAAA
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SEQ ID NO: 4189 ACATGATCTAAATGTTTAATGCTAAAGGTATATCGTAAGGGTAGTGTTTGT
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SEQ ID NO: 4191 ACTTGTCTAGCTCCTCTCGGTTCTTCCGAGCCAGCTCGTCATATTGGGCCCGG
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SEQ ID NO: 4192 TCGGCCGCCGGGCAGGTACATTTTCAAGAAGACAACAAATAAAATTACTCTCAG
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SEQ ID NO: 4193 ACATGATCTAAATGTTTAATGCTAAAGGTATATCGTAAGGGTAGTGTTTGT
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SEQ ID NO: 4194 CGGCCGCCGGGCAGGACGCGGGGACAAAATGGATACATAAAGACTAAGTAG
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SEQ ID NO: 4203 ACGCGGGCACAGTCAAGCTTTAAAGAAAGTGTTTGCTGAAAATAAAAGAAATC
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SEQ ID NO: 4204 ACTACTCGTAAAGAGCTTCAAGAAGCTTTCTTCATCCATTAAAGACCTTGTTC
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SEQ ID NO: 4205 ACTTTTTTTTTTTTTTTTTTTTTTGGCAGGAAATATTTATTGACAACCAGGGACA
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SEQ ID NO: 4206 ACTTTGCCCTCAGCATCTCCCTTCATGTCTGGGTCATGAACCTACGCTGGAAA
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SEQ ID NO: 4207 ACATGTTTGAAATGAGTTAGATACTTGAAAAGTCTAAACACACTGATTTAG
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CAGCNTCATAAGATCC

SEQ ID NO: 4208 ACGCGGGGCTCTTTTTCCGGCTGGAACCATGGAGGGTGTAGAAGAGAAGAAG
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SEQ ID NO: 4209 ACGCGGGTATGCGGGCCAATATCACAGCCATCCGCAGAGTCCGGAAGACAG
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SEQ ID NO: 4211 ACTCAGGCTCATCATCTAACCAGCCTTCGGGTTTTGTGGCCTCTTCATCTGGA
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TGATCCAGGTTGAGTCTGGTGTITANAAAGCANTTCAATAGCACACCACATCTATTCATTTTGGAA
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SEQ ID NO: 4212 ACGCGGGGCCCTGGAGCTGTCTCTGGAAAGTAGCTGGCGAGGTTACCTTAAC
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SEQ ID NO: 4213 ACTGGAAGGGTAGTGGAACGAGTAAAGGCCTTACCACATTGTTTACACTTAT
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SEQ ID NO: 4214 ACGCGGGGTCAGAAGCTTGGACCGCATCCTAGCCGCCGACTCACACAAGGCA
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SEQ ID NO: 4216 ACCGCCTATTCATTTTCTTGAACCTTCTCATAATGATAGTCATCAGTTGCCTTCT
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SEQ ID NO: 4218 ACGCGGGGGGAGCGGGCGGGCGGCTTGGCGGCTTGTGCAGCAATGGCCAAG
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SEQ ID NO: 4219 TCGAAGCCGGCCGCGGGCAGGTACGCGGGGACAGANGGAGGAAGGACAGC
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SEQ ID NO: 4220 ACTAAAGCATTTCATGGAGGCTCTTCAGGCTGGTGCAGACATCTCCATGATTG
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SEQ ID NO: 4221 ACATCAAAGATTACATGAAATCAATCAAAGGGGAAACTTGAAGAACAGAGAC
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SEQ ID NO: 4222 ACTATGGTAGAAATGGCGCCATCTTCCTTTTCATGCTTAAAAACCACCACCTG
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SEQ ID NO: 4223 ACACAATGGTTTATTAAAGGAATGTATGGCCACATCAACCTAGCAAGGATT
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SEQ ID NO: 4224 ACGCGGGGCTCACTGAGCACCGTCCCAGCATCCGGACACCACAGCGGCCCTT
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GATTCTGGGCATCCTATGACCATTGGATTTCATCCTGTTACTGGTATTTCGGCTCTGTGACAGTCTACC
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SEQ ID NO: 4225 ACANAATGGATTTTGAAGAGGGAGTCACCACTGGACCTCCAAGGAAGCCAC
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SEQ ID NO: 4226 ACTGTGTGAAAAAGTGGTGTCTGTGATTACTTCTCAACTGTTCAAGCACTCAGA
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SEQ ID NO: 4227 ACAGATTTTGAATATGGTGAAGGCAAGGGGCACTTTGGGCTAATACTCTA
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SEQ ID NO: 4236 ACTGCTCCCCACCTTAGTTCTTCACTAAACATAGAAAAATTGTTGAAAAGTA
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CGCNACCC

SEQ ID NO: 4238 ACCGGGGGTTAGAGGTATATGAAAAGATGAGAAGCTCACACTGGGCTTCTTC
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SEQ ID NO: 4239 ACGCGGGGCACAAAATACATGCAGAAGATGGTGGCAGATCTGGTGGAAAAT
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SEQ ID NO: 4240 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTNGCTAGGAAATATTTTTATATTAAT
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NAGCTGGGGAAACCAAACTGACTTCAAAGGCAGCTTCTGGACAGGTGGTGGGAGGGGACCCTT
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SEQ ID NO: 4241 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTNGCATCAAAAAGCTTTATTTCCATTG
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SEQ ID NO: 4242 ACGCGGGGGAGGAGCCTGAGGAAGAGGGCGGCGACGGTGGTGGTGACTGAG
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SEQ ID NO: 4243 ACGCGGGGCTGTTTCAGGATCAAATACAAAATTAATATACTAGGCCGAGCGCA
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SEQ ID NO: 4244 ACTCTCTCTGAAACAGCTACAAACATCTTGTTTTTGCAAAATATACAATGTTT
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SEQ ID NO: 4245 ACTTATACCCCTAAATATATAAAACATTTTAAAGAAAAAAGGAAGAAA
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SEQ ID NO: 4246 ACATAAGCATAATCAGTTATGGACAGCTTCTTGATATAAATTGCTATTCAGCAA
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GGNGGGGGA

SEQ ID NO: 4247 ACCAGGGCGGCGCGTGGTCTACGCCGAGTGACAGAGACGCTCAGGCTGTGTT
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SEQ ID NO: 4248 ACAGCCGCCACAGCTACACTCCAACCACGTCCCGCTCTCCCCAGCATTTCAC
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SEQ ID NO: 4249 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGANATGGAGTTTCTCCTTGTAAGC
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SEQ ID NO: 4251 ACCAGCTGTAACCAATACGATTCTGGGGCAGGTTGTGGGCGAGTAGAAGAAC
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TCCAGGAATGCTCTGGTCAGGGCTGCTGTGACTGTTGGCCCTGCTGTCTCTCTCTGTCCCCA
CGT

SEQ ID NO: 4252 ACGCGGGGCTTTCCGGCGGTGACGACCTACGCACACGAGAACATGCCTCTC
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SEQ ID NO: 4253 ACTCTCCTACTTCTGGGCATGGGGTGACTTGAGGAATGTTGAAGCCATTCTGA
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SEQ ID NO: 4254 ACTCTCCTACTTCTGGGCATGGGGTGACTTGAGGAATGTTGAAGCCATTCTGA
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SEQ ID NO: 4255 ACGCGGGGATAAGATAAGGGACCTGTTAGATGTTTCAAAGACCAACCTTTCA
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SEQ ID NO: 4256 ACGAATACACAGAGTGGTCTTTTCAACACTCCTCCCCCTACTCCACCGGACCT
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SEQ ID NO: 4257 ACGCGGGGGGATCGCTGCTCCTCTCTGGGGTCTGGCGGCCGACCGAGAACG
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SEQ ID NO: 4258 ACCACATCATCCATGCTGACATCTACCGCTGGTTTAAACATTTTCGTTTGATATTT
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CGCNACAA

SEQ ID NO: 4259 ACAGATCAGCAGAGCAGGACAGTTGGCAGCAGTGACCTCAGTAGGGAACAT
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SEQ ID NO: 4260 ACATACCCTTTCACTAGTGTGTTGAGTGGCACAAGCCACATTTACCATGAGAAA
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SEQ ID NO: 4261 ACCGCCAGCTCTCTGCTCTCCACAGGGCTCCCCGCCCCACCCGGCCTGATAAA
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SEQ ID NO: 4262 ACGCGGGGGAGGTGACTTCCTGGTCTATCCTGNTGACCCCTNCGNTTCCAC
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SEQ ID NO: 4264 AACTAAAGGGTGTTCCTCAAGAATAGAGGTGAAGATATTTTCATTTTGTTTA
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SEQ ID NO: 4266 ACGTGCAACCTTGTGCTACGGCCACTATTCTTCATTTTGGTAGAGCCGAAC
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SEQ ID NO: 4267 ACTATGGCCTCTTCAATACACTGTAGCCAGTGCAGTGGGCCCTTGGGGATGCC
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GACCT

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SEQ ID NO: 4295 ACGCGGGGGGTGAATGCTGCTGCCCCTGCTGGCAGCCACCTTGAGACCTCAC
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SEQ ID NO: 4296 ACGCGGAAGGACTTAAAGGAGAAGAAGGAAGTTGTGGAAGAGGCAGAAA
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SEQ ID NO: 4297 ACTTTTTTTTTTTTTTTTTTTTTTTTANAACAANACAGGNTTTTTTNINT
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SEQ ID NO: 4299 ACTTGGATGAGTCCAATGCCCTGGGGAAGAAGTTCATCATTCAAGACATTGA
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TANGAGCATGCCACGGGAAAAGTGAAGGATCTTGATCTTTTGT

SEQ ID NO: 4300 CTTTTCGAGCCGCCGCCCGGGCCAGGGTCCCCAACCN TNGCTTTCATTTCGA
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SEQ ID NO: 4301 ACGCCTCCACCGCCTCCTGCTCTGACGTGTGACGCTGCTGCGAAGTGGAGTCC
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CCTGAATGTTTTCTCANTGTGAAAAATTCATTTTATCTTGGNTGANCTGGAAATTTTTTCTGATAA
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SEQ ID NO: 4303 ACAGGTTTCACTATTACAAATGTATGATGTTAAACTAACAACTCATGACCTT
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SEQ ID NO: 4304 ACACTGCCTTATATTAGTCCATTTGTCCCATGTTTTCATCACTGAATAAACTTG
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SEQ ID NO: 4305 ACTTTCTTTTGGTTTTGTTTGTGTTTGTGTTTGTGTTTGGTTTTACAGAG
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SEQ ID NO: 4306 ACGCGGGGACCTTCAGCAGGGCTGTGGCTACCATGTTCTCTCGCGCGGGTG
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SEQ ID NO: 4307 ACTGAAATAGATGTATAGACCAATGGAACAGAACAGAGGCCCTCAGAAATAA
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 TTA AAAACCCAGAAAGAAACCTAGGCAATATCATTGAGGACATAGGCATGGACAAGGGCTTCAT
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SEQ ID NO: 4308 ACTTGCTGGTCTCAAATTTCCACAAGGAGATATCAATGGTGATACCACGTTCA
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 TCCTTCTCAAATTTTCAATGGTTCTTTTGTGATGCCACCGCATTTATAGATCAGATGGCCAGTAG
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 TTTTGGCTTTTA

SEQ ID NO: 4309 ACCACATTATAGTAAAAGTATTAGAAAAGTGACCCTCAAGGTGTATCAATTA
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 CCCATGCTACAAAATAAAAGTGAGAAAGCCATATAAATAAAGCAGAATAATGTTCTAGGCTTTAA
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SEQ ID NO: 4310 ACCTGTGAACCAAGTGTGTTGGGCAGGATGAGATGATCGACGTCATCGGGGTG
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 CCCACCGAGGCCTGCGCAAGGTGGCCTGTATTGGGGCATGGCATCCTGCTCGTGTAGCCTTCTCTG
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 TGCCAGGGCTACCTTATCAAGGACNGGAAAGCTGATCAAGAACAATGCCTCCACTGACTATGAC
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SEQ ID NO: 4311 ACTCGAAGATCTAGATTTCAATTCTCCATCTACAACCTGGTCACCCAACAAAGA
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SEQ ID NO: 4313 ACTTAGCATCGGAACTGCAATGTTAGGAGCAGGGTTGTGTGTTGGATTTGAC
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SEQ ID NO: 4314 ACCAGTTTCTGAGGACCATGATGTGGAATATTTTCTTCGGCTGGCTCATGAG
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SEQ ID NO: 4315 ACAAGTCTGGCTAGGGCTAAAATGTGAAGAATGAGAAGATGTTACCTGGGAA
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SEQ ID NO: 4316 ACTTCAAGAACCTGCACAGATTTACTCATATTCTTCAGGAAAGTGTTTAGAT
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SEQ ID NO: 4317 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTACAGGAAATCTGCCTATTTTATTTT
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CTTTAATTTTACTCAAGTAAAANCANAATCACATAACGGACATCAAAACTAAATAGTTACATCAT
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SEQ ID NO: 4318 GTACGCGGGGACTTCTGAGAAANTGAAACGACAGGGGAAAGGAGGTCTCAC
TGAGCACCGTCCCAGCATNCGGACACCACAGCGGCCCTTCGCTCCACNCANAAAACCACTTCT
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SEQ ID NO: 4319 ACGCGGGGGGCCTTGCAAATCTCTTGCAATTGAAGGCAGGAAAAGCAACAT
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SEQ ID NO: 4320 ACTGCATTCTTGAAGGAAAAAACTGCAGCCAAGGCAAGAACTCTGAAGTTT
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SEQ ID NO: 4321 ACATTTCAAGTGAAATAAGTAATTCTAGATAGGACAATTTAAATTGGATAAT
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SEQ ID NO: 4322 ACCTCCCATAGTTTGTCCCTGTCTCCACTTCAGCAATGTCAATAAAATGATC
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SEQ ID NO: 4323 ACTCTCTGCAGATGGTCCAAAATTGTAATGGAGTCTGTATTAGAAGAAAATA
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ACATGG

SEQ ID NO: 4324 ACCAGGTGGGGAGAAGTGTAGCAAATCTCAGTGCCAATTTGAGGGGAAGCC
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SEQ ID NO: 4325 ACTATCCCTGTAAGTCCCAAGAGCTCAGGAGCCAGGCTAGTGATCACACCAG
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SEQ ID NO: 4327 ACATAAGCATAATCAGTTATGGACAGCTTCTTGTATAAATTGCTATTCAGCAA
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SEQ ID NO: 4328 ACTGGCACAGCTCATCTGGAGCCGAGCCTTAGGCTTCCCTCTAGAAAGGCCC
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SEQ ID NO: 4331 ACGCGGGGCTTTTTCGCAACGGGTTTGCCGCCAGAACACAGGTGTCGTGAAA
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SEQ ID NO: 4337 ACTACCAGAGCGAGGAGCAGGCAGAGGAGGAGCTCCTGGACATGGCGGTGC
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SEQ ID NO: 4338 ACTGAACTGGAAGGAAGAGGAAAAAAGAAAATATTACGATGCTAAAACCTGA
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SEQ ID NO: 4339 ACTTGCAATGATGAGGACAACTCAGTTAGAAAAGTATAGTGAATGGATGGAATCT
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SEQ ID NO: 4340 ACGAAAAAGATATGACTCTGCAAGCAAAACAGTGTAAGCTGCTTTTTTCTTA
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SEQ ID NO: 4341 ACTGAAGAGCTATTACAATCCAAATNTTGCCGTTTCATAANTGTNATAANTN
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SEQ ID NO: 4342 ACACACACGGAATCATCCTATTTCATCTCCAAGCCACAGAAGGATGTATCAGC
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SEQ ID NO: 4343 ACCTCTCAACATTACCAAAAATCATTTCTTTAGAGGGAAGGAATAATCATTCAA
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SEQ ID NO: 4354 ACTTTTTTACATTTAATTTTTTTTTTAAGACAGTTTAAAGAGCAAACGTTTTTTA
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SEQ ID NO: 4359 ACCAGCAGCTGCAGGATGCTTCCATGCAGTGTGTGTTGACCTTGAGGGCCTG
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SEQ ID NO: 4365 ACGTCTACTGTAAAACCCATCCGAGGCACAAGCAGAGACAGATGTAGACCTT
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SEQ ID NO: 4366 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTNGGCATTACAAATAGTTTATAAGANAAT
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SEQ ID NO: 4376 ACTTTTTTTTTTTTTTTGGAGGGTATTTTTATTTGTGGGTCAAATAATCTGT
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SEQ ID NO: 4378 ACACTTTGAGACGCAGGAAGCAGCTGAAAGAGCTATTGAAAAAATGAATGG
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SEQ ID NO: 4379 ACAGTTTAAACAACAGCTGAAAGAATAAAGAAGCAATGTGGTCTTCAAGCT
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SEQ ID NO: 4381 ACCATATAATCCAACCTATCATGGTAAGGCCAGAAATCTTCTAACCTACCAGA
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SEQ ID NO: 4382 ACTGGGAGTCAGAACGTCTGGGTTCTAGTCTTGACTGCCATTAAGTACGAG
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SEQ ID NO: 4383 ACGCGGGGCTGCTCCGCTTGAGGAGAAGCGCCAAGTGC GCATGGGGACGCT
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SEQ ID NO: 4384 ACTAGGTGCTGCAATGCAAAGGGTTATGACAAAAGTGTCTGTAAATGTAGGA
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SEQ ID NO: 4387 ACTCGGGCAAGCCATGATCTTTTNCCTACTCGCAAAACAGCTANTTGGCTG
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SEQ ID NO: 4388 ACATTTGTTAAAATTGGTGAGCCNNTATTGATACATTATTAAGTCCATAGTTT
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SEQ ID NO: 4398 ACGTGATACAGCGAGGTGCTCAGTCCCCTCTGATCTTTCTCTATGTGGTTGAC
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TGGCTTTGT

SEQ ID NO: 4399 ACTGTGTGCAGCAGCTCAAGGAATTTGATGGGAAGAGCCTGGTCTCAGTTAC
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AGCGGATCATGAAAGCCCAGGCACTTCGGGACAACTCCACCATGGGCTATATGATGGCCAAAAAG
CACCTGGAGATCAACCCTGACCACCCCATTTGTGGAGACGCTGCGGCANAAGGCTGAGGCCGACAA
GAATGATAAGGCAGTTAAGGACCTGGTGGTGTGCTGTTTGAACCGCCCTGCTATCTTCTGGCTT
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SEQ ID NO: 4400 ACCGCCAGCTCTCTGCTCTCCACAGGGCTCCCCGCCACCCGGCCTGATAAA
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TGT

SEQ ID NO: 4401 ACGCGGGGAGGATAGGCCGAAGCTNGACCCGGAGGAGATGAAACGGAAGGT
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TGAATGGACATAAAATTCTGCTTGTTAAGAACAAGTTTGGCTCTGGTAACTGACCTTCAAAGCTAA
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SEQ ID NO: 4402 ACTGCTACCATTACATGGTTCCTTATTAATTTGAAAAGTGCCTGAAAGTTTG
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SEQ ID NO: 4403 ACGCGGGTATCAAGAATTGGTTTGTTCATTAAAGCAGGCAGTAGATATGAGG
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SEQ ID NO: 4404 ATTGTTGTCCATTTTCATGAGATTNTGCTTGAGGACACCATGGGCAANGATCTG
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SEQ ID NO: 4405 ACAGTTTTATGTGGGGAACAATTCATGCAGGCTACTGGAAAATTAATCTTAT
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SEQ ID NO: 4406 ACGCGGGGAGGCTTGAGGGAAGCATGGAGGTCCATGGCAAGCCCAAGGCTA
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SEQ ID NO: 4407 ACTTTTTTTTTTTTTTTTTTTTTTTTTTAAAGGATGAGAAGAGATTTTAGTTATTC
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- SEQ ID NO: 4408 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAATGACATCCTAAAATTCANAGGAG
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GGGGGATGGGGAAAGCTCCAAGGGCGAGGGAAGCA
- SEQ ID NO: 4409 ACGCGGGGGTATTGGGTTTGNCTGGCCTCGATTNAAAGAGACAGAACTGTCT
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TACATGCTGGTGAGCTTGTGCTCATTGGAGTGGCTGCTTGGGGCAANGCCTGGGTCTGGTGTNC
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- SEQ ID NO: 4410 ACCGCCAGCTCTCTGCTCTCCACAGGGCTCCCCGCCCCACCCGGCCTGATAAA
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- SEQ ID NO: 4411 ACCAATCCTTTTGACGCTATTCCATTAAGATAGAGAAAGAGAATCCTCCCTAA
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ACTACAGACCAACATNCCTGATGAACACAGATGCAAAGATTCTTAACAAAATACATCTAACCAAA
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- SEQ ID NO: 4412 ACTGTGTGCAGCAGCTCAAGGAATTTGATGGGAAGAGCCTGGTCTCAGTTAC
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- SEQ ID NO: 4413 ACCGCTCCAGGCCAGCTGTGTCTNNANATCTGAGCCTTGACAGCAGCGGTGCC
CAACATCACAGTGCGGGTGGAGAACTCAACCCGATGGTGGTGGGCTGTCTGGCTGAACTCAT
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TCTTTCTGGGACAGAGGCGACAAATCTGTGTGTTTGCTCATGCCCTCAACCCTCA
- SEQ ID NO: 4414 GGTACTCAACACCAACATCGATGGGCGGCGGAAAATAGCCTTTGCCATCACT
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- SEQ ID NO: 4415 GGTACTCTTGATGAAAGACCGTGAAACCAACAAATCAAGAGGATTTGCTTNT
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SEQ ID NO: 4416 GCGTGGTGGCGGCCGAGGTACTTTTTTTTTTTTTTTTTTTTTTTGGAGCAGAA
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SEQ ID NO: 4417 GGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTNNAAAAATNAAATTTT
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SEQ ID NO: 4418 GGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTTNGCTTTTTTTTTTTTTTTTTTTT
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 GAAATTCCACCCCTNGGGGGCGGTTNTAANGGATCCAACCNGGNNCCAANTTNGGGTNAN

SEQ ID NO: 4419 GCGTGGNCNCGGCCGACGTNCGCNGGTAAGATAGTTAANCCTGCNTAANN
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 TTGATAAAGNNAGGCNTGGTTGTGGTTAATCTGGNTTATTTTGNCCACNNGTTAANTNTNTCNT
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 AAACNTNTCCTATNGANTTNNCTTTCTCNTANAGTTTNTAGNGNNNTNTNNNCTNGTTAAATGNT
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SEQ ID NO: 4420 ACTT
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SEQ ID NO: 4421 NCCAGCGGCCGNCNCGNCGGNCCTTTTTTTTTTTTTTTTTTTTTTTGGTTGGNN
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CCTACCCTTAAAGAAGGNACCTTTCCTTTTAAANAA

SEQ ID NO: 4422 GGTACTNTCNTNTTCTNCTTTTTTTNNTTTTTGNNTTTTNNAACTTNNCACTTT
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SEQ ID NO: 4424 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTATTAATATTTGGGNCTTACAAATGA
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SEQ ID NO: 4425 ACGCGGGGTATTGAACTGGGGGTGGTCTGGCCTACTGGGCTGACATTA
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TTTAANCATAA

SEQ ID NO: 4426 ACACAAGCTTTGAGGAAGTGCAAAGGACTGACCTCTAGGCCAGAACAAGAT
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SEQ ID NO: 4427 ACTTCCAGCCACTAATTGAGATGTAGTTATGAAAGATTAGAATTGCCTTAA
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GNTGTTT

SEQ ID NO: 4428 ACAAGTCATTTTAGGAACTAATAGAAATAGGAATGTGGGAAGGCCAGGTGGT
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SEQ ID NO: 4429 ACTCTGGATGCCAGCACCAAGATCTATGCTGTGCGCGTGGATGCCGNCCATG
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SEQ ID NO: 4430 CGTGCCCNACGATTNCNCNGCTTTGAAAGTGAAACTATGGNTACCAAACAN
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 CACNAGACATCCATTTACTTAATCACAGAAAGTGGATCNTGCTACATANNTTCTGAANGTCTNCAT
 TCTACAAATTCTCCAGGCTNACGAATGTATCAANCTNNAAAATNATTCTANCNATNTNTGTNGNA
 AGAGATATCTTGCGNGCTTTT

SEQ ID NO: 4431 ACTTTTTTTTTTTTTTTTTTTTTTGTNTNTAACCCTGAANCANTTGATTCCAGT
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 CAAAGCAAAAAAGACTGTGGCTCCAGGACTCTCTGTGGGCGGAATCGGCNCTAAGGAGTTGGNGC
 AATTATTTTGTGCAAGGNANGAAGCCNAAAAGCCTGCATGCAACAAANTGGNATGAATAAATTT
 NTGTTTCCCCCTCTTNTNNAANAANGNAGCTGGTAATGGCAAANANTTCTTCAGNNNAACTT
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 TTTTNTNGTGNANNTTAAAAACCCCCNTCCTTNCNGGGCGGNCCGTTAAAANGGNCAAATTCCT
 AACANCTTGCCGGCCTT

SEQ ID NO: 4432 GNCTCGNCGCCTTTNNNGTCTCNCACCAANCCCATNGNNGCNCNGTAACTCT
 AACACANTTCCTTAAGGAATNAGCATGGGTTCTGTAGGAAGCAAACNNAGCTCTCCATAGAGAAAC
 CACTTTCACAGGATGATTAGGTGGACCTGCAATGAANANAATACATTTCAAAGATGGGTTCTGA
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 AAAAAATTCATNACGGATAAAATANATCTCAGGAAAAGGTCCAAGTCTCTCANAGACATACATT
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SEQ ID NO: 4433 ACGCGGGGGCGTCTTGTCTTGCTGGTGTGCGGTGGTTAGTTTCTGCGACTTG
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 AACC

SEQ ID NO: 4434 ACGCGGGGGCTGCGCGCCGCTAGGTGTCTGGGCGATCTATGGGCAAGAGCA
 AGGGCCACNATNACAGATTACGGCGAGGAGCANCTCAACGAGCTGGAGGCCCTGGAGTCCATCT
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SEQ ID NO: 4435 ACGCGGGGGCAGTCAGCGAGCCACGTGCTTGTGTTGACTGGACAACTTCCT
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 CCGGAGCCANAGCCANCTACTCAACACCTCTAANTAAAAAGCANAAAAACATNTTTCGATATT
 CGGTNAGGAGCATNCCANTATAANANNGGTTTINATAATNGGATNNTTATCNATNAGATTNGTN
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SEQ ID NO: 4436 ACCGCCGGGTTGAAAAAGAAACAAAGGAATACTTTGAGAGTTGGGGAGAAA
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SEQ ID NO: 4437 ACTTTTTTTTTTTTTTTTTTTTTCAGNGNAAAAATAACTTTTATTGAAACCCNACC
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SEQ ID NO: 4438 ACCCTNCAGANNATNGTGNTNTTTACNCCATTTTCTACAACCTCTGGATTGCTT
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 GTNGATCTGTATATTCTTAATCATCTAATNAACCCACCCAATTTGAAAACNCTNTTAATTTGTCATN
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 ATACTNGTTNAAANTTGCTNAAAGTNCACAAAATGCACATTTAAANCNATTTTCAAATCTNGTNTCA
 AANTTCAAAAAATTTTAATACANACAANCNANTTGATTTNTTTTNNACATNTAAAAAACTTCAA

SEQ ID NO: 4439 ACANGNGGAACAATCNGGTNTTTTAAATCAAAGAAGGNGGTGTTCAAGTTGCT
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 AGAACATTATATANAATTATTNCNAAATTCNNANAANCNGTATTAATAATCATNATTNACANCTT
 CNTANAAAAANTAACGGNCCCNNTNACTNTATNCNTGGAGNANGCNANTTAATGTTATCTTCTAA
 AATAANTG

SEQ ID NO: 4440 ACCATAGCCAAATCTGGGACAAGCGAGTGTTTAAACAAAATGACTGAAGCAC
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 TGTAGCAGATAAGGTTATTGTCACTTCAAAACACAACAACGATACCCAGCACATCTGGGAGTCTG
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 AAATATTCACAGTTCATAAACTTCTTATTTATGTATGGAGCACAAGACTGAAACTGGTTGAGGGA
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 GGGNCGNTNTTNTTGNANCCANTTNGNCCCANNTNGGNNNT

SEQ ID NO: 4441 GGTACTGGATCCAGGTGAGGTTGTGGGCTGNGNCCCGAAGGTGCTTGGCTCC
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 ATGAATCTTGATAATTTTCATGATATCTTTATAGATAGGGTCATTAATGACTGACTTCAATGCA
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 CGCCTCATAAATGCCCATTTGGTTCCCCATGAAGTTATAAAAANGGTTGGTTTGGGATGACCAANAA
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SEQ ID NO: 4442 GGTACGCGGGGAGGAGATCGCCATTATCCCCAGCAAAAAGCTCCGCAACAA
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SEQ ID NO: 4443 ACCTATTAGTAGTCACCGCCTTTTCCCTTCCCTCCAGCCCCTAACAACCACTA
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ATAAAAGGAATGAAGTACTTTTTTTTTTTTTTTTTTTGGGATTTTTTAGGTAGNGGGTGTGAGCT
TGAACGCTTCTTAATTGGGGGCTGCTTTTANGCCTACTATGGGTGGTAAAT

SEQ ID NO: 4444 GGTACGAGTGNTAGTGATGAGTTTGCTAATACAATGCCNGTCAGGCCACCT
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SEQ ID NO: 4445 ACNCGGGTGCAAGAGTCTCGCTCAGCNNNAAATANGNTNGCTTTCTTTTAAAT
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AATNTTNAANNTGNGTAANANCCCCNGGGGGNCCCCNAGNAGGGCGAGCC

SEQ ID NO: 4446 ACAAATGTTTTTTATTCAAAAATACAAAATAAATTATCTGTAGGCATGGACA
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SEQ ID NO: 4447 ACTTTGGGAGAATCGTGGTGTCTGGATGGCCTGATCAATGTATTAAAAATCA
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NTTT

SEQ ID NO: 4448 ACCTACTGGTAGTTGGGTTCAAGGAAATGGGATTGACTTGGCCTTCAGGCTCC
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ACCC

SEQ ID NO: 4449 ACGCGGGTGCACACTTTGGGAAGCATCACCATGAAGGTGAGGGACAGAGCTC
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SEQ ID NO: 4450 GCGTNGNCCCCNGCCGTTTTNCTGGCNGAGCTGAGGCTCNAATTCNNNAGG
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SEQ ID NO: 4451 ACTTTTTTTTTTTTTTTTTTTTTTTTTTTTATTAGGGCAAGTGCATGTTCTGTA
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SEQ ID NO: 4452 GGTACAATGCCTATCGCTTCTTAATCCAAAACGTTCTGNGGCTCCAGANGGA
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GNGNNCGCNATANAAT

SEQ ID NO: 4453 ACNGCGGGGCTCACTGAGCACCGTCCCAGCATCCGGACACCACAGCGGNCCT
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SEQ ID NO: 4454 GCGTGGCCGCGGNCGATGTNCAACACAGGCTACATGTAGGCAAGCTAAAGCT
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SEQ ID NO: 4455 ATNTNCCATGAAATATCCATGAACATACTTATANGTNAAGTATTATTTATTG
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SEQ ID NO: 4456 ACGCGGGGGAGGGCGGTGGCTCAGGCTCCTGGAAAGGACCGTCCACCCCTCC
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SEQ ID NO: 4457 GGTACTTINAATTG
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TGCACTCAAAAAACCTGTNGCTTCATTTAGAAAACNTTCTGNGTATNCCCAGGGNTTGGCCTTT
TNTNCCATGGGGNCCNTNCCCTTATTTNCACTTNCCTACTANNNGGGGTITGCCCTTTACTTGTGAGCAA
GCCCTNGTCTTGGCCCNNGTNCNGCCCTGCTATNTCCCTGCNATATGTNNANCTTTNTGGGNGN
NCNNTTCTTNGGNTTTTCNATAANACTNCTTGCN

SEQ ID NO: 4458 GCGNGGGCNGGGCCGANGNNCACNGGCTGCTNCCNNNGTNNATTTNNNGT
ATCNGAANCANGAGTNACATNTNNCAAACNNNGACTTANGAGCNNCNTCNGNGGACTCTNGGCT
NTCAACATGCACATGGCGGACTCTGGATTGATGCTGGAAGTTNATACNGAAAATGANAACAACAA
TGGAACANAAACACTTTCTGGAGCATATGGCTTCTANGGGCGCCNNNAACAGATNCCANGTGGAT
CTGGAACCTTGAGATTGAAAATATGGGTGCTCNTNTNAATGNNNATACTTNCANANAGCAGACTGN

ATACTATGCCAAAACANTCTCTAAAGACTTGCCATGAGCTGTAGAANTTCTTGCNGATATACTACA
 AAACAGCCATTGNGAGAAGCAAATATTGAACNTGAGCCGTGGAGTNATCCTTATAGAGATGCANG
 AANGTTNAATCCTATTTTACAAGAAAATGTTTTTGATNATNTNTNTGCCNCANCTTATCAAAAACT
 GCGCNTGGACAGGACAATTTTGNNGCCACNGNTAAAATTCAAATTTTGTAGTCTTNACGGANTTT
 ATNGGNNTATTTTACCCCCCTTTTCG

SEQ ID NO: 4459 GGTACTTTTTTTTTTTTTTTTTTTTTTTTTTTAGGGCCAGGTTTATTCCTC
 GGGTGGTTACATACACAGCACANAGGCACGGGCACCATGGGANAGGGCAGCACTCCTGCCTTNT
 GAGGGGATCTTGGCCTCACGGTGTAAANAAGGGANAGGATGGTTTCTCTTCTGCCCTCACTAGGGC
 CTAGGGAACCCAGGAGCAAATCCCACCACGCCTTNCATNTCTNANCCAAGGAGAAGCCACCTTGG
 TGACGTTTAGTTTCCAACCATTAAGTAAGTGGAGAAGGGATTGGCCTGGTCCCAACCATTAACAGG
 GGTGAAAATATAAACAGTAAAGGAAAAATCCCGTTTGGATGAAGGCCCCNGGAAAGGAGCANAT
 GACCCCTTCNAAACNTNTTCCNGGGAAAGGCANNTNCTGGGCCTNTTGGGCTGTAAANCCCTTG
 CTTTGGCAGAAAGGTTAGGGAAAATGATGGGGCTCNTTTGTTNGNATNTNTNATGNCNCAAATN
 NGGCTTTGNGGAANNCCCCCANGGANCNTCCCTTTNGNNTGNTGGCNNTTCTTNNGGTTCCCN
 ANNNAAAACNTNCTAANNAACGGGNNNTTNNCCCCNNTNAAAANTNNNTTNNCNNNTNT

SEQ ID NO: 4460 GGTANTTTNGGGAGCTACAGATAGTAAAGATGATGATGACATTGACCTCTTT
 GGATCTGATGATGAGGAGGAAAGTGAANAAGCAAANAGGCTAAGGGAAGAAGCTCTTGACAAT
 ATGAATCAAAGAAAGCCAAAAAACCTGCACTTGTGCGCAAGTCTTCCATCTTACTAGATGTGAAA
 CCTCGGGATGATGAGACAGATATGGCNAATTAGAGGAGTGCCTCANAAGCATTCAAGCANACG
 GCTTAGNCTGGGGCTCATCTAAACTAAGNTCCAGTGGGATACGGAATTAAGAACTTCAAATACA
 GTGTGTAGTCGAAGATGATNANNTTGGAAACAGANNTGCTGGAGGAGCCAGGATCACTGCTTTGA
 GGACTATGTGCANCCCATGGATGTGGCTGNTTCTACATGATCTAAAATCCATCTGGANCATGGCA
 TTTNAAATNNNAANATTNTCNGGATTTTGTCTCGNGCTGGGCTGTATNNCANNNGNCCTANTTTNG
 ATNTCTTTGCTGGCTNCNNTTGGNGTATCTCATNNTNGTATCCANNANAGNNGTTNCTCTTNCCTG
 GGNNGGCCNGTTTAAATGGGGAAATTNTTNAANNNNNGGNCNTTTNTTANGNAANCCNACCTTGN
 ACCAANTGGGNTAANNNTGGG

SEQ ID NO: 4461 NCNAGCGGCCGNCNGNCGGGNACGCGGGGCTCTTCTGCNCTACATNATGG
 CNCANGATCAANGTGAAGAGGATAACCCCATGCNGGAACCTCACATNNGCGAACTCTGTCTNANC
 ATNTGTGTTGNGNANAGTGGACACAGACTGACGCNANCNNNCANGGTGNNGGAGCAGNTNACAG
 GGCNTACCCNTGTGTTTTCCAAAGCTAGATCACTGTCAGATNCTTTGGCATCCGGAAAANTGAAAN
 GATNGTGNNACTGNACANTTNGAGGGGCCNANGCAGAAGANATNTTNGANAANGGTCTAAAG
 GTNCGGANTNTGAGTTAAGAAAAAACAACTTCTCAGATCTGGAAACTTTGGNTTTGGGATCCNG
 GAANACATCGNTCTGGGGATNAAATATNACCCAAGCATNGGTNTCTACAGCCTGTACTNTTATNT
 NNGGCTNGGTACGNACNTTTCAGCNTCTCAAAACANGAACTCACGACACGCTGGATNGNGGCC
 NTACACGAAATCAGCTNAGAAGAAAGNCCTGCCTGTTCAGCCANAAGTTTGATNNGGTCATACTT
 CTGGCAAATAATTCCGTTCTATCAAAAAACCNATAACATNTTTGGCCAACNAANAAACNAAAAAA
 AANTCCCGGGNTCNTTTGTGCCCCGACCGCC

SEQ ID NO: 4462 GGTACTTGCATGTAGGACAACCTCAGTTAGAAAAGTATAGTGAATGGATGGAA
 TCTACTGTATGATAAAAATGCTACAAACACCATTTAGTTGCCATNAATAAGAAATATACTTGT
 AAAAAAATCCAAATGCTGGCATTGTCCAGAAAAATTAACANGTTTATTTATNATTATNATNNAG
 CTGAACCGTGGNAACTTGTTCTCTNGAAACNAATTANCTTGCATTNATGCCNTACGNTTCTCTTTC
 ATTGCNATTATACTCNCACAGATGAAATTGGTTNTACTTTTNAATTNANTGNTTCTNTCCNNNTCN
 TTTCCNCATGNTATTGCTTCTCNNTTNTNCTCTNTGGCTNTCTNTCTANCGTTTTTNTCTNNTACCT
 TNTTCTGNNCTTNTTATCNACTNTTNTNATNNNTNTNANNTTATTTTTNTNTNTATTTCTTTGNT
 TGCCNTTTTGCNTNTTANCNTTAAATNNCTTCTACANCTTTTNTTNTNNTNATAATTTATATC
 TTTATNTNTCGNNNNCTTTTTATTNGTCTTNTTTTNTTTNGATTTCTATNTTTCATACNTNTACN
 NTTTTANTTATGNATCTCNTTCTCTATCATAATANCTTCCATNTATGGANTCCTTNTCCTTNTCTA
 TNGTTNNNTTNNNTNNG

SEQ ID NO: 4463 ACANAGTNTTTTCAACAACCTGAATTTTAAGTTTCTTTCTNCAATGTCTGCCCT
 CTACATGGACCTTCCATAATCTTTCTGCAATGTGATCATGCTCTGANATGATGGCATAAAGGAGGC
 NTTGGGGTGGGATGANGCANGCTGGGCTGGGGCTTCTNTTCCAGNNNNCTTNNNGANGNCTGAT
 NCANNCNANTNTTNTAATNTATATTCTAANGCNTCTGAATNTNAATCAAATGCCACACCTCC
 ANATCCTGAACCTATGAAGACTTCTTTTNGGAAAGAATATCATTATTGANAGTGTGNAANAGTN
 GCTNCCTCCGTGGTNTAAATCACTATCTAGCNATATNACCNTATNGATCTCCTCCACCACCAANT
 CTAAGAAGCTTATGGGCTCNCCTCGGNAANNTATNAATTTNTCTCCACTCCANTTAAAGACCTTAG
 AATGAGGGCTNAAATGNNNAAAAAAAAAAATNTCNCNTGACCCATNTTAGGGGNTCACCTGAA

NCTCTNNAANGATAAATTGNCATTTGCTTCCAAAAAATCTN

SEQ ID NO: 4464 ACCACCCTGAGTTCTGTCCAGGCCTATCAAGCCCTCCCACCATACTTTGGC
CTCCTCTGGCCTCTGTGGGGCGGCTCTCACATTACCTNCAGAAAGGCTTGCAGGCTCTCACCNAG
GGACACCTATAGNTGACAGGAGTGGAAGCAGCTCCCCTGACTCTGAAATCACCGAACTGAANTTT
CCATCAATAAAATCATGACTGATCTTGTAGCGGATGATTCTTCAAGATAACCCTTCNAACCTTGGGTN
NAGTTTACAGCTCTGACTTTACACTTCGGNTTNGGANACTTTCTTTAAATTATGTTNNTATTAATAA
TATTTTATTATGCNGAAANGGTNTTTGGGAANCTTTGTCACTNGTATTTCCCNTNANNTTNTACNTT
CNGCNGNNGAANCACTCTAANGCGGCGAATTNCAAGTNNANTGGCCTGCCGAAACTANTNGGNT
CNNGANCTACGGTACCNGGCTTNNGNNNANNATANGNNATANNCTTGATTCCATGANTGAAANTT
ATTATNNATTNNCNNTNACGNNANTNNATTNNATCCGGGAAAGNATNNAAGGNGAAAAGCCCTG
GGGAGNCTNAAATNANTNATGNNTANTCANNTTNNNTNNTATTTNGCTTAATCTNNNNTTATCTG
GT

SEQ ID NO: 4465 GTACGCGGGGGATTNCCNATGCGGGGAANANGTGGTTTTGACANAATGCCTC
CTGNTCNGGGTGGGCGTNCCTATGCTCCATNTATAANANATTATGATNATATGAGCCCTNGTNGA
GGACCACCTTCCCCTCCTCCCGGACGAGGCGGCGGGGTGGTANCAGAACTCGGANTCTTNCNT
TCCTCCTNCACNACCACCTATAGGGGGAGACCTCATNNCCTTNTGACATAACAGGGAGACCTGNA
AACCNNNNCAACTGCNTGGTTTGGTTTC

SEQ ID NO: 4466 ACNAGAAAAGGGTCCGAGCACAAGCCAAGAAGTTTGCGCCCTCATAAGCAG
CGACCTTGTGGCATCGTCAGAAGGAAGGGATTGGTTTNGGCAAGAACTTGTTTACAACATTTTTC
AAATCTAAAGTTGCTCCATACAATGACTAGTCACCTGGGGGGGTGGGCGGGCGCCATCTTNCATT
GCCGNCNCTNGGTGTGCGGACATTGANTTNCNTGAATTGCCCGTATACNTACANGGTATNNTNCTT
CCGTCTTTTNGGATTTTAGAATGGNTNTNTAANAACCTCANNNTTTTATTTTAAATNTNAGNTGGCC
AGTATTCTCAAACCTGCTGNNANAATATAAACTTTTTTAANACTTTGGGGTAAANNCCCCTATNG
GCCGAANTTCCCNCTCNTGGGAATGCCAGNCCATGCTTTTTNNACCCGANNCNNAACTTGGCNC
NTTGGNCCTNNAGCTGGGCTGTANTAGAAAATNGNTACCTCTTCCCTTCTGGCCTGNTNCCTTTTTT
TAAACCTTTCATATAAACNNGCGNGTCTGGNNCTGTCTTTTCNNACCTCNANACTCANNNTGGNAT
NNATTTTCGGGNNCTTGCG

SEQ ID NO: 4467 GGTACTTTTTTTTTTTTTTTTTTTTTTAAATCATCACANGCNCGTGCACTTTATT
GAATGACACTGTATACAGGTGTGNGGGTATAAACTGCTGTATCTAGGGGCAGGACCAAGGGGGCA
GGGGCAACAGCCCCAGCGTGCNGGGCCAACATTGCACANTGGAGTGCAAAGGTTGCATGCTANG
GGCGGCTACTAATAACCCCGTTTTCNNGTATTATCTGNAACATAATATGGTAGACTTGGCNCANAG
CCGAATACCACTAACAGGAGGAATCCAANTGGTCATNGAGGATGCCCNAAATCAAGGGCCCAN
ATNTTNAATGCCCTTTNCCNGCTGANGCATANGCCTGGGCCCCNGGTTANTTCTCCCATCANNNTNT
TCTTGTCNCTAGACTTCACTNGTNTTANGCGAATTGCTTTTGAAAGCCCCATNANANTCNTCCNC
TTATATNTAAANANNNGGNTTGNACAATGGGCTCANNACNTNANTGNGTNTGGTCCCGGNATGGT
NTNTCCTNTGGATNTTTGATCACCTCTCTCAACCTNNNAAAGAATGGTNTNTNGGGGNNCCTCC
ANGANAAACNNCTNATTTTTNTNCCTGGNNNTNTATTGGCNTTGGGCANGGAAATTN

SEQ ID NO: 4468 ANATTTGGCCCTGGTTGATTTCTCTTCTGAATAGTTTCCATCCCNATGAAGAG
GACCTCTCAAGTATTAGTGCGACACCACTTCCAGAGGAGTTTGAATTANAAGGATTTTGGCATTG
AGANCTTCTTTTCAGGAAGTTGGATTTNTNNAAGGTCACCANGGTATTACAGGGGACAAANAAGG
TNAGCNCGACGAATACNACNGCAANGCTNGATCTNTATNGGNAAATGGATTGTTGATAATCATC
CTAGGCTNATTCAGTGTGAAANTGANGNAGGGAAATTGTTGGGTATCACGANANATCCCNAAATT
AATACTGGAAGACNCCAGNGTAGCNAAAGAGAACCGATTCTACAAGAACAACTGANATAGAGT
CGCTTGCTNTAANTGGGANTCCANGGTNTAAAANCAGGGTGNNTNTACAAANCNCGAAAANNAA
NNATATNTTTTTNTNCCNNGANANGAATNCANTTNGGNTTTNCAANGATNTTTTTGGGNACCAN
GGNTTGGNCTTTNCCTAAAATCTTGGNGGCCTTNAATATTAAACTTNAAGGGGANNTTNGGNGTT
TANTNTCTTT

SEQ ID NO: 4469 GGTACCTGCAGGCCTCCTACACCTACCTCTCTCTGGGCTTCTATTTTCGACCGC
GATGATGTGGCTCTGGAAGGCGTGAGCCACTTCTTCCGNGAACTGGCCGAGGAGAAGCGCGAGGG
CTACGAGCGTCTCNTGAAGATGCAAAACACGCGTGCGGCCGCGCTCTCTTCCAGGACATCANAG
AANCCAGCTGAAGATGAGTGGGGTAAACCCNAGACGCGCATGAAAGCTGCNATGGCCCTGNANA
NAAAGNTGANCCAGNNCCTTTTGAACCTTAATGCCCTGGGNGNNTGTNGCGCNCTGGCNCNCCATT
NTTGTANANTNTTCTGGANNNTTTANCTTCTNTATNANGTGGGAANTTGANACTGTATNNAGNAN
NATGTTNGATNANTNTNANCTAANNTTNTATTNTGTTGNGGGTGCNCANGTTGCTTTGGCTNGTC
TGAAATNTTCTTNTAGATNGGATAANCANTTTCAGCTATGTATTTAAGATTATCTNCNNNAATTCT
NNNGNTGACCNTTGGGATANGGCTNTCTTCTTTATTTAAATNGGTTATGTATATCNTNTATNTCTT

TNTNTCATGAGGNTTGCTNTTTNAATNNTCANACANCTCNCCCTTG

SEQ ID NO: 4470 GTACGAGATGGCACCCTCCAGAGCCNNTTCTATGGAGATNAGATGAATCTT
TTNTCNCTGTGCCATAAGATCAANCNGTGTGACTACCCACCACTCCCNNGNGAGCACTACTCCGA
NAAGTNACCANAACCTNGTCAGCATGTNCATNTGCCNTGACCCCCACCANATACCTGANATCNNAT
ACGTGCACCAGGTGGCCAAGCAGATNCACATATNGATGTCCAGCACCTGAGCATGNATGCACCNG
TCCTTATCAAANNCANGCACCACTTTGCCTTACTTGAGTCGTCTCTNTTCAAGTGGCCACCTGGTA
GCCTANAACAGATAANACCCAGGGGNTCAGNANGTTCCCCAAANGCTGCNCAACCTTACANCANAT
GCTTNAGGCATANNNACTGANGGAGGGGCGCTGGCCACAATGTGNACTGATGGNTAGATTNCA
AANTTCCTTTNTTTATACTGTGTGNAGCANNTCTAAANTTGGTCAANTAANGCAAGGGGNGGTCA
ACNCAGC

Figure 3.

SEQ ID NO: 4471

MASRSMRLLLLSCLAKTGVLDIIMRPSCAPGWFYHKSNCYGYFRKLRNWSDAELEC
QSYGNGAHLASILSLKEASTIAEYISGYQRSQPIWIGLHDPQKRQQWQWIDGAMYLYRS
WSGKSMGGNKHCAEMSSNNNFLTWSSNECNKRQHFLCKYRP

SEQ ID NO: 4473

MEKIPVSAFLLLVALSYTLARDTTVKPGAKKDTKDSRPKLPQTLSRGWGDQLIWTQTYE
EALYKSKTSNKPLMIIHHLDECPHSQALKKVFAENKEIQKLAEQFVLLNLVYETTDKHL
PDGQYVPRIMFVDPSLTVRADITGRYSNRLYAYEPADTALLLDNMKKALKLLKTEL

SEQ ID NO: 4475

MRAWIFFLLCLAGRALAAPQQEALPDETEVVEETVAEVTEVSVGANPVQVEVGEFDDG
AEETEEVVVAENPCQNHCKHGKVCELDENNTPMCVCQDPTSCPAPIGEFEKVCSNDN
KTFDSSCHFFATKCTLEGTKKGHKLHLDYIGPCKYIPPCLDSELTFFPLMRDWLKNVL
VTLYERDEDNNLLTEKQKLRVKKIHENEKRL EAGDHPVELLARDFEKNYNMYIFPVHW
QFGQLDQHPIDGYLSHTELAPLRAPLIPMEHCTTRFFETCDLDNDKYIALDEWAGCFGIK
QKIDDKDLVI

SEQ ID NO: 4477

MEKLVQLKESFGGSSEIVDQLEVEIRNMTLLVEKLETLDKNNVLAIRREIVALKTKLKE
CEASKDQNTPTVVHPPPTPGSCGHGGVNVISKPSVVQLNWRGFSYLYGAWGRDYSPQHP
NKGLYWVAPLNTDGRLLLEYIYLNTLDDLLLYINARELRITYGQGSCTAVYNNNMVYN
MYNTGNIRVNLTTNTIAVTQTLNAAAYNNRFSYANVAWQAY

SEQ ID NO: 4479

MTERRVPFSLRGPSWDPFRDWYPHSRLFDQAFGLPRLPEEWSQWLGGSSWPGYVRPL
PPAAIESPAVAAPAYSRAISRQLSSGVSEIRHTADRWRVSLDVNHFAPDELTVKTKDGV
VEITGKHEERQDEHGYISRCFTRKYTLPPGVDPTQVSSSLSPGTLTVEAPMPKLATQSN
EITIPVTFESRAQLGGPEAAKSDETAAK

SEQ ID NO: 4481

MSSTSPNLQKAIDLASKAAQEDKAGNYEEALQLYQHAVQYFLHVVKYEAQGDKAKQS
IRAKCTEYLDRAEKLKEYLKNKEKKAQKPVKEGQPSPADEKGNDSDGEGESDDPEKRR
LQNQLQGAIVDRPNVKWSDVAGLEGAKEALKEAVILPIKFPHLFTGKRTPWRGILLFGP
PGTGKSYLAKAVATEANNSTFFSISSSDLVSKWLGESEKLVKNLFLQ LARENKPSIIFIDEID
SLCGSRSENESEAARRIKTEFLVQM QGVGVDNDGILVLGATNIPWVVLDSAIRRRFEKRIY
IPLPEPHARAAMFKLHLGTTQNSL TEADFRELGRKTDGYSGADIGIIVRDALMQPVRKV
QSATHFKKVRGPSRADPNHLVDDLLTPCSPGDPGAIENTWMDVPGDKLLEPVVSMDSM
LRSLNNTKPTVNEHDLLKLKFTEDFGQEG

SEQ ID NO: 4483

MHKEEHEVAVLGAPPSTILPRSTVINIHSETSPDHVVWSL FNTLFLNWCCLGFI AFAYS
VKSRRDRKMVGDTVGAQAYASTAKCLNIWALILGILMTIGIFILLVFGSVTVYHIMLQIIQ
EKRGY

SEQ ID NO: 4485

MRTIAILAAILLVALQAQAESLQERADEATTQKQSGEDNQDLAISFAGNGLSALRTSGSQ
ARATCYCRTGRCATRESLSGVCEISGRLYRLCCR

SEQ ID NO: 4487

MPAPEQASLVEEGQPQTRQEAASTGPGMEPETTATTILASVKEQELQFQRLTRELEVER
QIVASQLERCRLGAESPSIASTSSTEKSFPWRSTDVPNTGVSKPRVSDAVQPNNYLIRTEP
EQGTLYSPEQTSLHESEGLGNSRSSTQMNSYSDSGYQEAGSFHNSQNVSKADNRQQHS
FIGSTNNHVVRNSRAEGQTLVQPSVANRAMRRVSSVPSRAQSPSYVISTGVSPSRGSLRT
SLGSGFGSPSVTDPRPLNPSAYSSTTLPAARAASPYQRPASPTAIRRIGSVTSRQTSNPNG
PTPQYQTTARVGSPLTLTDAQTRVASPSQGQVGSSSPKRSGMTAVPQHLGPSLQRTVHD
MEQFGQQQYDIYERMVPPRPDSL TGLRSSYASQHSQLGQDLRSAVSPDLHITPIYEGRTY
YSPVYRSPNHGTVELQGSQTALYRTGVSGIGNLQRTSSQRSTLTYQRNNYALNTTATYA
EPYRPIQYRVQECNYNRLQHAVPADDGTTTRSPSIDSIQKDPREFAWRDPELPEVIHMLEH
QFPSVQANAAAYLQHLCFGDNKVKMEVCRLGGIKHLVDLLDHRVLEVQKNACGALRN
LVFGKSTDENKIAMKNVGGIPALLRLLRKSIDAEVRELVTGVLWNLSSCDAVKMTIIRD
ALSTLTNTVIVPHSGWNNSSFDDDDHKIKFQTSLVLRNTTGCLRNLTSAGEEARKQMRSC
EGLVDSL LYVIHTCVNTSDYDSKTVENCVCTLRNLSYRLELEV PQARLLGLNELDDLLG
KESPSKDSEPCSWGKKKKKKKKRTPQEDQWDGVGPIPGLSKSPKGVEMLWHPSVVKPYL
TLAESSNPATLEGSAGSLQNL SASNWKFAAYIRGGRPKRKGLPILVELLRMDNDRVVS
SGATALRNMALDVRNKEGKYAMRDLVNRLPGGNGPSVLSDETMAAICCALHEVTSK
NMENAKALADSGGIEKL VNITKGRGDRSSLKVVKAAAQVLNTLWQYRDLRSIYKKDG
WNQNHFITPVSTLERDRFKSHPSLSTTNQQMSPIIQSVGSTSSSPALLGIRDPRSEYDRTQP
PMQYYNSQGDATHKGLYPGSSKPSPIYISSYSSPAREQNRRQLHQQLYYSQDDSNRKNF
DAYRLYLQSPHSYEDPYFDDR VHFPASTDYSTQYGLKSTTNYVDFYSTKRPSYRAEQYP
GSPDSWVYDQDAQQRNSFFLTLFRLR

SEQ ID NO: 4489

MSGIALSRLAQERKAWRKDHPFGFVAVPTKNPDGTMNLMNWECAIPGKKGTPWEGGL
FKLRMLFKDDYPSSPPKCKFEPPLFHPNVYPSGTVCLSILEEDKDWRPAITIKQILLGIQEL
LNEPNIQDPAQAEAYTIYCQNRVEYEKRVRAQAKKFAPS

SEQ ID NO: 4491

MCDRKAVIKNADMSEEMQQDSVECATQALEKYNIEKDIAAHIKKEFDKKYNPTWHCIV
GRNFGSYVTHETKHFIYFYLQGVAILLFKSG

SEQ ID NO: 4493

MENFQKVEKIGEGTYGVVYKARNKLTGEVVALKKIRXDTETEGVPSTAIREISLLKELN
HPNIVKLLDVIHTENKLYLVFEFLHQDLKKFMDASALTGIPLPLIKSYLFQLLQGLAFCHS
HRVLHRDLKPQNLLINTEGAIKLADFGFLARAFGVVVRTYTHEVVTLWYRAPEILLGCKY
YSTAVDIWSLGCIFAEMVTRRALFPGDSEIDQLFRIFRTLGTPEVVWPGVTSMPDYKPS
FPKWARQDFSKVVPPLDEDGRSLLSQMLHYDPNKRISAKAALAHPPFQDVTKPVPHLRL

Figure 2.

SEQ ID NO: 4472

AAGATATAAAAGCTCCAGAAACGTTGACTGGGACCACTGGAGACACTGAAGAAGGC
AGGGGCCCTTAGAGTCTTGGTTGCCAAACAGATTTGCAGATCAAGGAGAACCAGG
AGTTTCAAAGAAGCGCTAGTAAGGTCTCTGAGATCCTTGCCTAGCTACATCCTCAG
GGTAGGAGGAAGATGGCTTCCAGAAGCATGCGGCTGCTCCTATTGCTGAGCTGCCT
GGCCAAAACAGGAGTCTTGGGTGATATCATCATGAGACCCAGCTGTGCTCCTGGAT
GGTTTTACCACAAGTCCAATTGCTATGGTTACTTCAGGAAGCTGAGGAAGTGGTCTG
ATGCCGAGCTCGAGTGTGAGTCTTACGGAAACGGAGCCACCTGGCATCTATCCTGA
GTTTAAAGGAAGCCAGCACCATAGCAGAGTACATAAGTGGCTATCAGAGAAGCCAG
CCGATATGGATTGGCCTGCACGACCCACAGAAGAGGCAGCAGTGGCAGTGGATTGA
TGGGGCCATGTATCTGTACAGATCCTGGTCTGGCAAGTCCATGGGTGGGAACAAGC
ACTGTGCTGAGATGAGCTCCAATAACAACCTTTTTAACTTGGAGCAGCAACGAATGCA
ACAAGCGCCAACACTTCCTGTGCAAGTACCGACCATAGAGCAAGAATCAAGATTCT
GCTAACTCCTGCACAGCCCCGTCTCTTCTTCTGCTAGCCTGGCTAAATCTGCTCA
TTATTTTACAGAGGGGAAACCTAGCAAATAAGAGTGATAAGGGCCCTACTACACTGG
CTTTTTTAGGCTTAGAGACAGAACTTTAGCATTGGCCCAGTAGTGGCTTCTAGCTC
TAAATGTTTGCCCCGCCATCCCTTTCCACAGTATCCTTCTTCCCTCCTCCCCTGTCTCT
GGCTGTCTCGAGCAGTCTAGAAGAGTGCATCTCCAGCCTATGAAACAGCTGGGTCTT
TGGCCATAAGAAGTAAAGATTTGAAGACAGAAGGAAGAAACTCAGGAGTAAGCTTC
TAGACCCCTTCAGCTTCTACACCCTTCTGCCCTCTCTCCATTGCCTGCACCCCAACCC
AGCCACTCAACTCCTGCTTGTTTTTCTTTGGCCATAGGAAGGTTTACCAGTAGAATC
CTTGCTAGGTTGATGTGGGCCATACATTCCTTTAATAAACCATTTGTGTACATAAGAA
AAAAAAA

SEQ ID NO: 4474

ACCGCATCCTAGCCGCCGACTCACACAAGGCAGGTGGGTGAGGAAATCCAGAGTTG
CCATGGAGAAAATTCCAGTGTGAGCATTCTTGCTCCTTGTGGCCCTCTCCTACACTCT
GGCCAGAGATACCACAGTCAAACCTGGAGCCAAAAAGGACACAAAGGACTCTCGA
CCCAAACCTGCCCCAGACCCTCTCCAGAGGTTGGGGTGACCAACTCATCTGGACTCAG
ACATATGAAGAAGCTCTATATAAATCCAAGACAAGCAACAAACCCTTGATGATTAT
TCATCACTTGATGAGTGCCACACAGTCAAGCTTTAAAGAAAGTGTTTGCTGAAAA
TAAAGAAATCCAGAAATTGGCAGAGCAGTTTGTCTCCTCAATCTGGTTTATGAAAC
AACTGACAAACACCTTTCTCCTGATGGCCAGTATGTCCCCAGGATTATGTTTGTTGA
CCCATCTCTGACAGTTAGAGCCGATATCACTGGAAGATATTCAAATCGTCTCTATGC
TTACGAACCTGCAGATACAGCTCTGTTGCTTGACAACATGAAGAAAGCTCTCAAGTT
GCTGAAGACTGAATTGTAAAGAAAAAAATCTCCAAGCCCTTCTGTCTGTCAGGCCT
TGAGACTTGAAACCAGAAGAAGTGTGAGAAGACTGGCTAGTGTGGAAGCATAGTGA
ACACACTGATTAGGTTATGGTTTAATGTTACAACAACCTATTTTTTAAGAAAAACATG
TTTTAGAAATTTGGTTTCAAGTGTACATGTGTGAAAACAATATTGTATACTACCATA
GTGAGCCATGATTTTCTAAAAAAAATAAATGTTTTGGGGGTGTTCTGTTTTCTCC
AACTTGGTCTTTTACAGTGGTTCGTTTACCAAATAGGATTAAACACACACAAAATGC
TCAAGGAAGGGACAAGACAAAACCAAACCTAGTTCAAATGATGAAGACCAAAGAC
CAAGTTATCATCTCACCACACCACAGGTTCTCACTAGATGACTGTAAGTAGACACGA
GCTTAATCAACAGAAGTATCAAGCCATGTGCTTTAGCATAAAAAAA

A

SEQ ID NO: 4476

CGGGAGAGCGCGCTCTGCCTGCCGCTGCCTGCCTGCCACTGAGGGTTCCTCAGCACC
ATGAGGGCCTGGATCTTCTTTCTCCTTTGCCTGGCCGGGAGGGCCTTGGCAGCCCCT
CAGCAAGAAGCCCTGCCTGATGAGACAGAGGTGGTGGAAAGAACTGTGGCAGAGG
TGA CTGAGGTATCTGTGGGAGCTAATCCTGTCCAGGTGGAAGTAGGAGAATTTGAT
GATGGTGCAGAGGAAACCGAAGAGGAGGTGGTGGCGGAAAATCCCTGCCAGAACC
ACCACTGCAAACACGGCAAGGTGTGCGAGCTGGATGAGAACAACACCCCCATGTGC
GTGTGCCAGGACCCACCAGCTGCCAGCCCCATTGGCGAGTTTGAGAAGGTGTG
CAGCAATGACAACAAGACCTTCGACTCTTCTGCCACTTCTTTGCCACAAAGTGCAC
CCTGGAGGGCACCAAGAAGGGCCACAAGCTCCACCTGGACTACATCGGGCCTTGCA
AATACATCCCCCTTGCTGGACTCTGAGCTGACCGAATTTCCCCTGCGCATGCGGG
ACTGGCTCAAGAACGTCTGGTCACCCTGTATGAGAGGGATGAGGACAACAACCTT
CTGACTGAGAAGCAGAAGCTGCGGGTGAAGAAGATCCATGAGAATGAGAAGCGCC
TGGAGGCAGGAGACCACCCCGTGGAGCTGCTGGCCCCGGGACTTCGAGAAGA ACTAT
AACATGTACATCTTCCCTGTACACTGGCAGTTCGGCCAGCTGGACCAGCACCCCAT
GACGGGTACCTCTCCACACCGAGCTGGCTCCACTGCGTGCTCCCTCATCCCCATG
GAGCATTGCACCACCCGCTTTTCGAGACCTGTGACCTGGACAATGACAAGTACATC
GCCCTGGATGAGTGGGCCGGCTGCTTCGGCATCAAGCAGAAGGATATCGACAAGGA
TCTTGTGATCTAAATCCACTCCTTCCACAGTACCGGATTCTCTCTTTAACCCCTCCCCT
TCGTGTTTCCCCCAATGTTTAAAATGTTTGGATGGTGTGTTGTTCTGCCTGGAGACAA
GGTGCTAACATAGATTTAAGTGAATACATTAACGGTGCTAAAAATGAAAATTCTAA
CCCAAGACATGACATTCTTAGCTGTA ACTTA ACTATTAAGGCCTTTTCCACACGCAT
TAATAGTCCCATTTTTCTCTTGCCATTTGTAGCTTTGCCCATTTGTCTTATTGGCACATG
GGTGGACACGGATCTGCTGGGCTCTGCCTTAAACACACATTGCAGCTTCAACTTTTC
TCITTAGTGTTCTGTTTGAACTAATACTTACCGAGTCAGACTTTGTGTTTCATTTTCAT
TTCAGGGTCTTGGCTGCCTGTGGGCTTCCCCAGGTGGCCTGGAGGTGGGCAAAGGG
AAGTAACAGACACACGATGTTGTCAAGGATGGTTTTGGGACTAGAGGCTCAGTGGT
GGGAGAGATCCCTGCAGAATCCACCAACCAGAACGTGGTGTGCTGAGGCTGTAAC
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SEQ ID NO: 4478

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SEQ ID NO: 4480

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SEQ ID NO: 4482

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SEQ ID NO: 4484

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SEQ ID NO: 4486

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SEQ ID NO: 4488

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SEQ ID NO: 4490

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SEQ ID NO: 4492

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SEQ ID NO: 4494

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